

HOW DO EXPERIENCES ENHANCE BRAND RELATIONSHIP PERFORMANCE AND VALUE CO-CREATION IN SOCIAL COMMERCE? THE ROLE OF CONSUMER ENGAGEMENT AND SELF BRAND-CONNECTION

Abstract

The presence of brands on social networking sites is raising the competitive bar and providing opportunities for consumers to experience products and services. In this sense, it has become very difficult for brands to differentiate themselves from one another. Therefore, providing good experiences to consumers becomes of paramount importance. The current study provides insights into the relationship between experiential value (cognitive, hedonic, social, and ethical) and consumer engagement (cognitive processing, affection, and activation), resulting in brand relationship performance outcomes that in turn lead to value co-creation intentions. In addition, the role of self-brand connection as a moderator and consumer engagement as a mediator is also examined. A large-scale survey was conducted with 485 consumers who follow brand pages at a popular social networking site. The findings reveal that experiential value has a positive impact on consumer engagement, while consumer engagement is positively associated with brand loyalty and satisfaction, which in turn leads to value co-creation. The current study uncovers the ways in which marketers can capitalize on consumer experiences when engaging in social commerce and thereby enhance value co-creation.

Keywords: Social commerce; consumer engagement; experiential value; value co-creation; self-brand connection; brand relationship performance

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1. Introduction

Consumers are faced with immense options in terms of market offerings on social networking sites (SNS), and it has become crucial for companies to provide consumers with enriched experiences to keep them engaged. Big players such as Apple, Amazon, and Uber have brand pages on SNS, with millions of followers, and they are continuously reinventing themselves by delivering immediate, simple, and effective individualized experiences (Mckinsey & Company, 2017). In addition, companies are making significant investments to ensure a strong presence on SNS. For instance, General Motors has announced that it will invest 30 million dollars annually to generate content for its brand page on Facebook, and in the future, it is willing to continue investing in Facebook because brand pages are a way of developing long-term relationships between brands and consumers (Zaglia, 2013). Furthermore, almost 50% of the 100 leading global brands have created their own brand pages on SNS (Bowden et al., 2017). Several authors argue that having brand pages on SNS allows the brands to develop significant numbers of followers, generate brand-related content, post brand-related messages, offer enhanced brand/customer interactions in real time, and facilitate the maintaining and developing of customer relationships (Ashley & Tuten, 2015; Lipsman et al., 2012; Lopez et al., 2017). As consumers' expectations continue to increase, brands will face further pressure to provide seamless experiences.

In the era of social media, value proposition is being redefined in a way that it emphasizes on more memorable, meaningful, pleasurable, and engaging experiences for consumers - and brands need to respond accordingly to gain a competitive advantage (Grewal, 2009). Therefore, the new economic offerings to consumer become 'experiences' to go along with services, goods, and commodities (Pine & Gilmore, 1999; Varshneya, Das, & Khare, 2017).

Experiential value is at the core of the current study, and it is defined in the current context as value derived from experiences with the brand's SNS and in particular its Facebook page (Varshneya et al., 2017)

More specifically, we present two research gaps: first, experiential value as a concept has gained sufficient attention from practitioners and academicians alike (Schmitt, 1999; Pine and Gillmore, 1999; Ponsonby & Boyle, 2004; Varshneya et al. 2017); however, previous studies have not focused on the multi-dimensionality of the experiential value construct comprising of dimensions, such as social value, emotional value, functional value, and ethical value. Even these dimensions have only been examined in offline retail settings (Varshneya et al., 2017) providing a very limited scope. In addition, several authors have argued that literature pertaining to experiential value appears to be fragmented (Verhoef et al., 2009; Wu & Liang, 2009) and few studies have attempted to assess its empirical validation (Varshneya et al., 2017).

Second, the recent research has shown that for brand pages operating on SNS to be successful, consumer engagement is quite important since it fosters active community participation (Martinez-Lopez et al., 2017). In addition, the antecedents and consequences of consumer engagement in the context of brand pages have been explored from the perspective of brand communities (Bitter & Grabner-Kräuter, 2016; Islam, Rahman, & Hollebeek, 2018; Khan et al., 2016; Zaglia, 2013 offering important contributions. However, the need still exists to empirically investigate and validate the strength and directionality of relevant constructs that can serve as the antecedents or outcomes of consumer engagement (Carlson et al., 2018; Hollebeek et al., 2016; Islam & Rahman, 2016; Tafesse & Wien, 2018). More importantly, the Marketing Science Institute (2016) has made the study of consumer engagement a priority topic, while empirical evidence in this domain is still nascent (Brodie et al., 2013; Dessart et al., 2015).

Against this backdrop, the purpose of this study is fourfold: 1) to study how four experiential value factors (cognitive value, hedonic value, social value, ethical value) influence consumer engagement (a second-order reflective measure of cognitive processing, affection, and activation); 2) to explore how consumer engagement affects brand relationship performance outcomes, such as brand loyalty and satisfaction; 3) to understand whether self-brand connection exerts an influence on the relationship between experiential value constructs and consumer engagement constructs; and 4) to examine whether brand relationship performance constructs affect the value co-creation intentions of consumers. The theoretical framework has therefore been embedded in social commerce literature (Hajli et al., 2017b ; Huang & Benyoucef, 2017; Nadeem et al., 2015), consumer engagement literature (Hollebeek et al., 2014; Matinez-Lopez et al., 2017; Tafesse, 2016), brand experience literature (Brakus et al., 2009; Pine & Gillmore, 1999; Verhoef et al., 2009; Mathwick et al., 2001;), and brand relationship performance and (Carlson et al., 2019; DeVries & Carlson, 2014).

The premise here is that consumers follow a large number of brand pages on SNSs. However, evidence is still inconclusive as to why consumers engage with brand pages on particular SNSs—or engage in social commerce based on their experiences with such brand pages, thereby drawing brand-relationship performance and co-creating value. Therefore, the current study explores the role of experiential value in engaging consumers with social commerce.

Next, we present the theoretical background with key concepts used in the study followed by theoretical model and hypotheses development. We then present the methodology part along with results and discussions. Lastly, we present theoretical implications, managerial implications, limitations and suggestions for future research.

2. Theoretical background

2.1 Experiential value

In this age of social media, consumers consistently come across an overwhelming number of choices with respect to products and services on SNSs (Khan et al., 2016), making it very challenging for consumers to differentiate between the products/service offerings (Ponosby & Boyle, 2004). Therefore, experience itself becomes a different type of offering that is not easy to replicate (Pine & Gillmore, 1999). Broadly speaking, consumer experience is defined as the set of interactions intentionally created by the company, that requires consumer involvement and evokes a reaction from them (Verhoef et al., 2009; Palmer, 2010; Gallarza et al., 2015). As previously mentioned, Pine and Gillmore (1999) and Oh et al. (2007) have all asserted that “value in experiences” also encompass value in products, commodities, and services. Verhoef et al. (2009) have argued that several large retailers, such as Walmart, Nike, IBM, Best Buy, and Macy’s, focus on providing engaging experiences for their consumers as a major tool to differentiate themselves from their competitors.

A central and frequently revisited concept in the domain of marketing is that of value (Gallarza et al., 2015). Experience on the other hand has only recently received more attention, as brands are now actively trying to differentiate themselves on the basis of experiences (Varshneya et al., 2017) rather than merely providing low-priced, innovative products and better services. A seminal study by Pine and Gillmore (1999) already predicted a shift in consumer demand several decades ago, a shift that will affect commodities, products, services, and experiences alike. Earlier consumers used to find value in products and services; however, changing consumer demands, increased competition, and low differentiation in the scope of offerings has led consumers to find value in experiences, which can also be referred to as

“experiential value” (Lang & Hooker, 2013; Varshneya & Das, 2017). Experiential value can be divided into four subcategories (Varshneya & Das, 2017). The first category is cognitive value, which encompasses the quality of services, effort, convenience, and time. Other categories include hedonic value (pleasure, enjoyment, and escapism), social value (social approval, status, esteem), and ethical value (trust and privacy).

Broadly speaking, experiential value is conceptualized as the value derived by consumers from experiences (Mathwick et al., 2001; Yuan & Wu, 2008; Varshneya et al., 2017). For example, Starbucks charges a premium price for coffee not because of the high economic value of the cup of coffee, but for the experiences provided to consumers in the form of a comfortable atmosphere, Internet connectivity, reading newspapers, an attractive ambiance, sharing a cup of coffee with friends, customized types of coffee, to mention just a few of the experiences (Varshneya & Das, 2017).

Whereas previously the role of experiential value has been studied to identify the willingness of a customer to recommend and buy the product, Sweeney and Soutar (2001) argue that consumer research has shifted from a functional value aspect to include intrinsic aspects, such as experiences. In the online shopping context, the most important attributes influencing experiential value tend out to be aesthetic appeal and navigation flow (Wang et al., 2011). In traditional retail settings, consumers derive experiential value from product selection, personnel interaction, and the ambiance and layout of store, which pertain to functional, social, and hedonic values (Varshneya et al., 2017).

Grewal (2009) has argued that experience is the new value proposition for consumers in the form of pleasurable, engaging, meaningful, and memorable impressions. In settings where it becomes essential for companies to compete with their rivals on value dimensions, the intangible

value (as in the example of experiences) found especially in online settings becomes more important than functional value (Sanchez et al., 2006). Several authors have discussed various facets of value, such as social, emotional, functional, epistemic, conditional (Sheth, 1991), sensory, cognitive, behavioral, and relational values (Schmitt, 1999). Based on this notion, experiential value is a multi-dimensional construct (Mathwick et al., 2001; Sanchez et al., 2006; Williams & Soutar, 2009) that can also be defined as the realistic or perceived performance of an offering (product/service) originating from interactions within a purchase setting, which can either hinder or expedite the achievement of customers goals and purposes. In social media or social commerce settings where buying and selling is taking place, experiences become of utmost importance. There are many definitions of social commerce available in the relevant literature (Mikalef et al., 2017; Nadeem et al., 2017; Yadav et al., 2013; Zhang & Benyoucef, 2016) and, based on the extant literature, social commerce is defined as “an activity that harnesses Web 2.0 technologies / social media that supports sellers and buyers to interact, engage, collaborate, and create value that eventually leads to the intentions or actual decision making to shop for or acquire information about products and services” (Nadeem, 2016). Previous authors have also argued that social commerce has been evolved through e-commerce and is facilitated by the advances in Web 2.0 technologies and SNS in particular (Hajli et al., 2017b ; Huang & Benyoucef, 2017). However, barely any studies to date capture the role of experiences in consumer engagement in social commerce settings.

Experiences can lead to the formation of a consistent brand image in the mind of a consumer. For long-term associations with a specific brand, a company needs to provide the types of experiences that allow consumers to connect with the brand. For instance, as in the example of offline retail settings, the reasons for deriving value from the experience of

purchasing products may include the following: i) involving the consumer in multisensory imagery, which can lead to the stimulation of various mental activities (Kim, 2012); ii) trying various products can provide the consumer with an aspect of fun or pleasure (Figure & Ogle, 2000); iii) generating the excitement involved in searching for a new product (O'Cass & Choy, 2008); iv) creating the sense of comfort that derives from group conformity and symbolic self-expression (De Pelsmacker et al., 2005); and v) simulating the atmosphere found in the retail store and when looking at visually appealing merchandise. Therefore, it can be inferred that offline settings are somehow now being replicated in online settings as well, providing consumers with hedonic, cognitive, and social values. Hence, it becomes paramount to investigate how consumers derive value from such experiences and the extent to which they are willing to engage with such online experiences.

2.2 Consumer engagement with a brand's Facebook page

Consumer engagement refers to the readiness of customers to actively interact with and participate in a focal object (a website, organizational activity, organization, brand and community), one that can either be positive or negative depending on the nature of consumers' interaction with various touch points (virtual/physical) (Islam & Rahman, 2016, p.12). In the field of marketing, consumer engagement is defined as “a psychological state that occurs by virtue of co-creative, interactive experiences with a brand” (Hollebeek et al., 2011, p.260), and one of the most vital characteristics for companies is to deliver compelling experiences to consumers (Dessart et al., 2016) on their SNS brand pages. Consumer engagement encompasses the behavioral and psychological disposition of consumers, leading to interaction with other consumers and brands on SNSs (Dessart et al., 2016).

According to Baldus et al. (2015), consumer engagement is bound up with cognitive, affective, motivational, and behavioral responses, such as producing consumer-generated content and heightened involvement with brand-related activities (Simon et al., 2013). In addition, these responses drive consumer behavior to go beyond mere transactional exchange (Dessart et al., 2016) and translate into favorable brand relationship performance outcomes (Jahn & Kunz, 2012).

Brand pages serve as brand-moderated and dedicated platforms for consumer interaction and brand communication in social media (Tafesse, 2016; Tafesse & Wien, 2018). Consumers interact with the brands through inbuilt response options, such as likes, shares, wows, laughs, and loves (Kabaddiyi & Price, 2014). The interactive nature of brand pages highlights the notion of consumer engagement (Hollebeek et al., 2014). In addition, brand pages enlist an unlimited number of followers, who follow brands not only to gather information about them, but for purchase purposes as well. Brand pages can also be viewed through the theoretical lens of brand community, as “a specialized, non-geographically bound community based on a set of structured social relations amongst people who are admirers of a specific brand” (Muinz & O’Guinn, 2001, p.412), with it becoming increasingly difficult to differentiate the community from the brand pages themselves.

Brand pages are media-rich platforms involving enriched message strategies (communicating through photos, links, text, videos). Brand pages can be classified into various categories, such as functional or emotional (Ashley & Tuten, 2015), based on the type of rich experiential environment they create (Tafesse, 2016). Kaplan and Haelinen (2010) have asserted that this phenomenon is embedded in the theory of media richness (Daft & Lengel, 1986), and SNSs exhibit greater degrees of social presence based on the engagement of consumers.

The Facebook pages of various brands also provide a wide array of experiences to consumers, such as viewing or posting videos/photos, looking at or generating content through comments, attending or showing interest in events, connecting with friends and other likeminded people, or sharing brand stories with others (Ashley & Tuten, 2015; Simon et al., 2013). Consumer interactions with the brands are largely driven by the aforementioned experiences, which in terms of value can broadly be classified as cognitive, hedonic, social, and ethical values. In this sense, SNS brand pages that adopt a positive experiential approach often stimulate consumer engagement without them seemingly feeling any concern for less entertaining, less well-connected brands or privacy and security issues. Consumer involvement with the brand pages as a means of deriving positive value experiences can be one strong approach to understanding consumer engagement behavior. In this regard, this study examines the question of just what motivates consumers to engage with SNS brand pages.

The study focuses on consumer engagement as a multidimensional construct (Baldus et al., 2015; Dessart et al., 2016; Hollebeek et al., 2014; Vivek et al., 2012). Especially at the macro level, consumer engagement literature focuses on the cognitive, affective, and behavioral dimensions of such engagement (Hollebeek, 2011; Hollebeek et al., 2014), with some scholars emphasizing the need to look at consumer engagement as a context-dependent construct (Hollebeek, 2011; Dessart et al., 2015). Therefore, consumer engagement is investigated as a consequence of consumers' experiences with a brand's Facebook page in a social commerce context.

2.3 Brand relationship performance outcomes: brand loyalty and satisfaction

2.3.1 Brand loyalty

Brand loyalty is a pattern of consumer behavior by which consumers exhibit their relationship with a brand or product / service and make repeated purchases over time. Seen from a different perspective, it can also be defined as the extent of faithfulness exhibited by the consumer towards a brand irrespective of the pressure generated by competing brands (Aaker, 1991). Companies employ several marketing strategies, such as rewards, incentives, co-creation, promotions, celebrity endorsements, or trials, to achieve brand loyalty (Ferrell & Hartline, 2008). Loyal customers are likely to wait or search for a product in other stores if it is not readily available rather than go with an alternative product (Cengiz & Akdemir-Cengiz, 2016). Though the decision to buy a product or service may be either conscious or unconscious, it is the trust that a consumer has in the brand that influences the decision (Hajli et al., 2017b; Lin et al., 2019; Nadeem et al., 2015). Consumers perceive that a specific brand will fulfill their emotional and physical needs, which evokes emotions in the process of buying and using it (Kahren, 2009). Assael (1994) has proposed three dimensions of brand loyalty: 1) customer attitudes towards the brand and/or suggestions to switch brands; 2) consumer behavior reflects the tendency to buy one preferred brand over others; and 3) the consumer tendency to pay more for the brand they are loyal to (price sensitivity). Similarly, Mellens et al. (1996) have noted that several factors, including affective, behavioral, and attitudinal dimensions, can influence loyalty towards a brand, reflecting the multi-dimensional influencing factors of brand loyalty, a finding also supported by Cengiz and Akdemir-Cengiz (2016).

Accordingly, multi-dimensional constructs were used here to define brand loyalty and its association with the constructs. Customer satisfaction, for instance, was found to be positively

associated with brand loyalty. Consumers may tend to be more loyal to a brand or service if they are satisfied with the product or service (Awan & Rehman, 2014). Similarly, Rather et al. (2018) found that customer brand engagement and affective commitment are both significant drivers of brand loyalty. The relationship between customer engagement and brand loyalty has received increasing attention due to the rise in the number of SNSs in recent years, since online consumer engagement is largely different from traditional consumer engagement (offline). Different approaches, such as co-creation, consumer-generated content, the ability of the consumers to comment on or review a product or service, or interactive techniques like discussion, forums and communities, are just a few social media techniques used to engage the customers.

2.3.2 Satisfaction

Consumer satisfaction is one of the important aspects in marketing and customer relationships management (CRM). It is the foundation for building customer relations and brand image. Companies usually deploy various approaches, like providing quality goods at fair prices, effective customer service, providing discounts, or special offers, to increase satisfaction among consumers. Satisfaction can help in building brand loyalty; however, it depends on the prior consumption rate of a product by consumers. Scholars have found that satisfaction's effect on brand loyalty weakens with increased prior consumption experiences (Ahrholdt et al., 2019). The dimensions of excitement, sophistication, and competence are usually used on online platforms to strategize and position the platforms so as to better compete with other platforms. Positive relationships between these three dimensions and consumer satisfaction have been identified by Ong et al. (2017). Similarly, the characteristics of an online social commerce platform, including

information quality, source credibility, interactivity, and accessibility, were found to have a positive influence on decision support and consumer satisfaction (Yoo et al., 2017).

Similarly, the socialness or ability of the platform to allow for effective communication and interactions among users was found to be positively associated with increasing customer satisfaction (Barnes & Vidgen, 2014), which can be considered one of the efforts taken by companies to increase customer satisfaction. In a similar context, the user experience of learning and training on an online platform or with respect to a product or service can be positively associated with consumer satisfaction (Lee, 2018). One study of online shopping experiences (Pham & Ahammad, 2017) has identified some interesting results related to customer satisfaction. The post-online purchase experiences of consumers, including their experiences with order fulfilment, ease of return, and the responsiveness of the customer service department, are the most significant contributors to online customer satisfaction.

2.4. Value co-creation

With increasing competition in the marketplace, companies are adopting new techniques in every aspect of their business to increase value and competitive advantage. Customer-centric approaches such as feedbacks and surveys offer a two-way communication channel for businesses, though. Nonetheless, there is always a chance that the development team misinterprets the feedback, which may lead to the design of products or services with incorrect specifications. In considering this issue, companies have adopted a new strategy called co-creation, wherein the customers are also considered stakeholders (Nadeem et al., 2019; Ramaswamy & Ozcan, 2014). Incorporating customers into the business processes, which is also termed co-creating, is a new approach many consider critical for a company's success in today's

market (Bhalla, 2010). Co-creation is a strategy that incorporates a company's customer-centric efforts via a participatory approach and uses the customer-based metrics to measure success (Bhalla, 2010). This approach fully involves the customers in the process of co-creating value. It promotes and encourages active involvement from the customers to create on-demand and made-to-order products or services (Smedlund et al., 2018). Co-creation methods not only involve customers, but also the stakeholders at all levels of the business. Co-creating value encourages customer loyalty by creating a sense of ownership. Since customers are considered an integral part of organizational operations, they are more likely to be associated with the brand, and they will do more to make the brand a success.

Apart from the promotional perspective, co-creation supports the creation of meaningful products and services for customers. Through traditional feedback mechanisms, the requirements in the initial stage may change by the time the product is developed and launched in the market. Therefore, through co-creation the changes can be made more quickly by gathering real-time feedback, which helps companies create a valuable product or service for customers (Rozenes & Cohen, 2017). Co-creation ensures that the end result of any endeavor is not just of value to consumers, but also that the product or service is meaningful to the customer at an emotional, cultural, or mental level (Smedlund et al., 2018). In addition, it also helps reduce the costs and risks associated with the development process. For example, consumers may provide input on product design by prototyping or customer testing the product through simulation tools, allowing a company to gather instant feedback from consumers using the prototypes. Similarly, consumers can be involved in the distribution process, such as the pick-up and drop-off approaches used by Amazon. In addition, brand identity is co-created through multi-directional conversations between consumers and marketers. Furthermore, consumers can also be involved in the pricing

process by providing options, such as same-day, one-day, or two-day delivery or whether a company should provide paperback or electronic copies of the product, allowing the customer to decide the price by choosing the features available. These co-creation approaches can be very effective in online marketing, especially on social networking and s-commerce platforms (Hajli et al., 2017a; Smedlund et al., 2018; Tajvidi et al., 2017; Wang et al., 2020).

Accordingly, See-To and Ho (2014) have argued that e-WOM, value co-creation, and purchase intention on SNSs are inter-related. They identified that consumer trust in a product and e-WOM both impact value co-creation, while value co-creation impacts purchase intention on SNSs. The results reflect the role of value co-creation in promotional (e-WOM) and marketing operations (purchase intention) on SNSs. The multi-faceted aspect of value co-creation can be understood from a study conducted by Pinho et al. (2014). The study explored the concept of value co-creation in complex value networks with many actors (hospitals). It identified a need for designing and managing services to co-create value, not only by enabling dyadic interactions between the customer and the service provider, but also by supporting and enabling value co-creation interactions among different customers. Similarly, another study conducted by Cossio-Silva et al. (2016) identified the existence of a significant relationship between value co-creation and attitudinal loyalty, reflecting the concept of ownership and loyalty. Similarly, Jaakkola and Alexander (2014) found that customer engagement behavior affects value co-creation by virtue of its customers' diverse resource contributions to a firm and other stakeholders, reflecting a focus on the resources that can be contributed by customers and the impact these contributions have on other stakeholders. In a similar study, researchers found that the platform features of a site can significantly impact customer participation and engagement behavior in value co-creation and that value co-creation can improve the brand image and reputation of firms (Foroudi

et al., 2019). When considering the significant associations of value co-creation with various constructs, the relationship between consumer engagement and brand relationship performance is worth investigating.

3. Theoretical framework

The basic premise of the proposed model is that at a brand's Facebook page, consumers derive value from their experiences. The different values derived from such experiences will directly affect consumer engagement, but indirectly predict brand relationship performance outcomes (i.e., brand loyalty and satisfaction), and consequently to have positive impacts on value co-creation. As shown in Figure 1, self-brand connection moderates the relationships between experiential value constructs and consumer engagement.

[Figure 1 about here]

3.1 Effects of experiential value on consumer engagement

Based on the various experiences of consumers with respect to a brand or an online platform, we can safely state that they tend to engage at varying levels based on their positive or negative perceptions. These experiences generate values, which are considered antecedents to the issue of consumer engagement focused on in this study. The four antecedents include cognitive value, hedonic value, social value, and ethical value. The association of these antecedents with consumer engagement is analyzed below by validating various hypotheses. Accordingly, the antecedents to consumer engagement and the hypotheses development is explained in the following sections.

When consumers seek excellence and efficiency and are somehow engaged in a way where they can demonstrate their intellectual capabilities, such a phenomenon is referred to as cognitive value (Schmitt, 1999). Robinson and Doss (2011) have argued that consumers appreciate and evaluate brand stores / communities in terms of reliability, convenience, and quality. In previous studies, cognitive value has been examined when grocery shopping since it is a task-oriented phenomenon (Wood Ruffe-Burton & WakenShaw, 2011). In the context of a brand's Facebook page, consumers derive more cognitive value when the content is more practical, useful, and functional (Jahn & Kunz, 2012). For instance, a brand's Facebook page provides information and services that are more accessible than traditional channels of communication. Even in the case of queries, consumers can receive quick feedback from brand pages, which they then list as "very responsive." The most notable outcomes for experiences focused on in previous studies are attitude, satisfaction, willingness to pay, intention, and loyalty (Tan, Salo, Juntunen, & Kumar, 2019; Varshneya et al., 2017); however, consumer engagement has seldom been studied as an outcome of experiences. In a previous study by Jahn and Kunz (2012), the role of functional value, which is closely related to cognitive value, proved to be positive and significant with respect to consumer engagement behavior. Consequently, it follows that if consumer needs are satisfied through more useful, practical content, then it is likely that consumer engagement with the brand pages will be greater. Hence:

H1: Cognitive value positively affects consumer engagement.

When consumers are provided with a sense of enjoyment or entertainment value derived from their experiences, it is referred to as hedonic value (Sweeney & Soutar, 2001). For instance,

consumers might often seek hedonic value in terms of escapism, entertainment, and enjoyment at a company's Facebook site. Fun and enjoyment have been crucial aspects of hedonic value in the context of a brand's Facebook page with regards to consumer engagement (DeVries & Carlson, 2014). Further, Jahn and Kunz (2012) have asserted that for consumers to derive the utility of hedonic value, the brand's Facebook page must be entertaining, exciting, and provide access to the fun element. For instance, a consumer might be more interested in a brand that positions and projects itself as fun rather boring and keeps consumer interest alive with exciting posts. Pine and Gilmore (1999) have referred to consumer experience in terms of escapist, educational, entertainment, and aesthetic experiences. In this sense, companies opt to provide such experiences to consumers wherein they are passively or actively engaged. Previously, Madupu and Cooley (2010) also have found hedonic value to be the major driver in a brand's level of community participation online. Therefore, it is postulated:

H2: Hedonic value positively affects consumer engagement.

SNSs serve as the primary source of social interactions amongst consumers. Through these socialization opportunities, consumers can derive social value from interacting with each other (DeVries & Carlson, 2014; Hennig-Thurau et al., 2010). A brand's Facebook page provides consumers with the opportunity to generate this "linking value" based on peer-to-peer bonds (Libai et al., 2010), thereby serving the motivation of consumers to interact with each other. At SNSs, consumers must first perceive other consumers as being similar before freely interacting and communicating with one another (Carlson et al., 2018; DeVries & Carlson, 2014; Jahn & Kunz, 2012). In this sense, it is more likely that if consumers derive higher social value

at a brand's Facebook page, it may then lead to greater consumer engagement behavior.

Previously, DeVries and Carlson (2014) and Jahn and Kunz (2012) have found that social value significantly affects the Facebook platform. Therefore, this study posits that consumers deriving higher social value from a brand's Facebook page are likely to engage more with the brand's Facebook page.

H3: Social value positively affects consumer engagement.

Ethical value encompasses the constructs of privacy and security of the consumer when interacting with brand communities. These constructs are of paramount importance given the current challenges faced by consumers when sharing their personal data on online brand communities. The constructs of consumer privacy and security are also related to the role of trust (Roman, 2007). Ethical value is referred to as the value that consumers derive from the experience based on their sense of privacy and security while operating in the online brand communities. Facebook is currently facing huge pressure for a recent data breach scandal (Cadwalladr & Graham-Harrison, 2018), which is also being termed as the biggest data breach scandal in the history of SNSs. In this sense, the ethical issues pertaining to social commerce sites become of paramount importance. Privacy and security issues have been well studied in online retailing contexts, but seldom with regards to the contexts of social commerce and consumer engagement. Additionally, various dimensions of experiential value have been studied beforehand in different contexts. However, such value dimensions as ethical value have received little attention (Mathwick et al., 2001; Sweeney & Soutar, 2001; Varshneya et al., 2017), especially the significance of ethical value in influencing consumer behavior.

Therefore, it is postulated that higher utility derived by consumers in terms of the ethical value of brand pages will lead to higher consumer engagement. Hence:

H4: Ethical value positively affects consumer engagement.

3.2. Effects of consumer engagement on brand relationship performance outcomes

Consumer engagement with a brand can be identified at various levels, resulting in various consequences or outcomes. One such outcome is satisfaction. For instance, Woisetschläger et al. (2008) have identified that satisfaction with a community positively influences community participation. The community value and support positively influencing consumer engagement may be the result of increased satisfaction. Though the concept of consumer engagement has formed a major construct in marketing research, a lack of consensus on how to define the construct has led to its fragmentation in the discipline (Barger et al., 2016), leading to a wide range of associations and definitions. Assessing the level of consumer engagement on social networking platforms may need to be done differently than with traditional engagement models since consumers may find such participation both engaging and interesting, which may lead to higher satisfaction levels among consumers. Accordingly, Thakur (2018) in a study of consumer engagement and online reviews on social commerce platforms found that customer engagement partially mediated the level of customer satisfaction—online review intention; on the other hand, it fully mediated the level of trust—online review intention relationship. Thus, we can postulate that consumer engagement is positively associated with satisfaction, as presented in the following hypothesis:

H5: Consumer engagement positively affects satisfaction.

Brand loyalty reflects the faithfulness and commitment by a consumer towards a specific brand. The levels of affective commitment and activation, which lead to greater consumer engagement, are strong drivers of brand loyalty (Naumann & Bowden, 2015; Leckie et al., 2016). In a similar context, So et al. (2014) found that consumer engagement enhances brand trust and brand loyalty in the tourism industry. However, a cross-sectional study conducted by Apenes Solem (2016) revealed the positive short-term effects of consumer participation and engagement, but no positive effects of consumer engagement could be identified in terms of brand loyalty in a subsequent longitudinal study. The varying results of the short-term and long-term studies reflect the dynamic nature of the relationship between consumer engagement and brand loyalty. A similar study conducted by Zheng et al. (2015) found that consumer engagement influences brand loyalty through online community commitment; they likewise found that users tend to focus more on the benefits of engaging in the community than on the costs. Thus, we can state that most of the studies identified positive associations between consumer engagement and brand loyalty; accordingly, the following hypothesis is postulated:

H6: Consumer engagement positively affects brand loyalty.

3.3. Consequences of brand relationship performance outcomes

Existing marketing literature defines customer satisfaction as the feeling of pleasure that a customer achieves when post-consumption evaluations meet or surpass customer expectations (Giovanis et al., 2014). It is obvious from such a definition of satisfaction that customer

dissatisfaction in turn leads to the less likely success of customer-brand exchanges (Jain et al., 2018). Previous research has clearly established that positive post-consumption evaluations lead to long-term patronage (Giovanis et al., 2014). Moreover, customer satisfaction is a prerequisite and progenitor of loyalty (Ladhari et al., 2011; Cooil et al., 2007). Further, customer satisfaction can even be considered a significant agent of loyalty (Sashi, 2012). Similarly, the results of a study by Fuentes-Blasco et al. (2017) indicate that customer satisfaction has a direct effect on loyalty. Additionally, a study by Jani and Han (2014) has demonstrated that satisfaction positively affects loyalty. Consistent with the previous findings, studies by Bennett et al. (2005) and Hyun (2010) revealed that satisfaction contributes significantly to loyalty. The findings of other studies have also confirmed that customer satisfaction has a positive and significant effect on brand e-loyalty (Oh et al., 2014). In other settings, such as sports events, customer satisfaction has also been positively related to brand loyalty (Ahrholdt et al., 2019). Hence, we postulate that this relationship will hold true in social commerce settings:

H7: Satisfaction positively affects brand loyalty.

The notion of a satisfied customer refers to consumers who are happy with their previous shopping experience (Anderson and Srinivasan, 2003; Nadeem et al., 2020b). Satisfaction represents the post-consumption evaluations of a product and services by consumers (Gustafsson et al., 2005). In other words, satisfaction stems from the positive attitudes surrounding customer experiences with the consumption of products or services (Boulding et al., 1993). Although relatively little research has examined the relationship between customer satisfaction and value creation, a few studies have found that customer satisfaction is a significant factor in value co-

creation (Vega-Vazquez et al., 2013; Lengnick-Hall et al., 2000; Chiu et al., 2019) and that brand relationship performance outcomes can be considered a foundation for value co-creation (Storbacka et al., 2016). Therefore, it can be assumed that if consumers are satisfied, they will co-create value. Therefore, we assume the following:

H8: Satisfaction positively affects value co-creation intentions.

Recent studies indicate a change in marketing philosophy that implies the active participation of customers in value creation (Prahalad and Ramaswamy, 2000; Vargo and Lusch, 2004). Firms are taking the role of value facilitators, while customers, with a sense of motivation and a desire to participate, are value co-creators (Payne et al., 2008). Consequently, value co-creation is referred to as a joint function of supplier and customer actions, resulting in creation value (Vargo & Lusch, 2008). Customers use a brand's SNS pages to obtain information related to products and share their ideas, give feedback, and make recommendations in the form of reviews, ratings, and comments, and as a result, they collaborate with their brand and will co-create value (Hajli et al., 2017).

Likewise, from the company's viewpoint, customers, by participating on its brand pages and providing comments and suggestions, provide an opportunity for firms to communicate with their customers and promote and improve their products and services based on customer feedback and posts (See-To and Ho, 2014). The findings from a study by Fournier (1998) show that a high-quality and active relationship between customers and firms enhances the possibility of a high level of interaction with customers, which leads to brand loyalty. A study by Cossío-Silva et al. (2016) also confirmed that there is significant relationship between value co-creation and loyalty.

Similarly, research by Kamboj et al. (2018) revealed that brand loyalty positively affects branding co-creation in brand communities on SNSs. Hence, the antecedent to participation in a brand community is to increase brand loyalty, which will certainly contribute to a brand and influence branding co-creation (Payne et al., 2009; Hajli et al., 2017). Accordingly, we propose the following hypothesis:

H9: Brand loyalty positively affects value co-creation.

3.4. Indirect effects of experiential value on satisfaction, brand loyalty, and value co-creation

The concept of customer experience with a brand has gained the attention of marketers. Customer experience is related to the holistic perception of the experiential value that is the result of interactions between brands and customers during their relationship (Ahn et al., 2019). Hence, customers' intellectual experiences create a strong and positive interaction with a brand (Ahn & Back, 2018). Prior studies have demonstrated the crucial role of experiential value in value co-creation (Fan, 2020; Awuor et al., 2015; Shamim & Ghazali, 2014) and have highlighted the importance of customers' perceptions of experiential value in value co-creation (Shamim & Ghazali, 2014). Schmitt (2010) and Mathwick et al. (2001) have noted that experiential value is a multidimensional concept and can be explained via different dimensions. Additionally, Ahn et al. (2019) believe that understanding the importance of multidimensional experiential values will facilitate a full understanding of the values involved in interactions with customers and value co-creation.

A study by Gentile et al. (2007) has also confirmed the important contribution of customer experience to value co-creation. Similarly, the results of a study by Shamim and Ghazali (2014)

revealed that value creation is influenced by experiential value. Our understanding of the role of online experiential value in brand relationship performance and value co-creation still remains limited, though, for SNSs, and few studies have focused on experiential value and customers' co-creation behavior. Accordingly, we developed the following hypothesis:

H10a-c: Experiential value constructs indirectly affect (a) satisfaction, (b) brand loyalty, and (c) value co-creation through consumer engagement.

3.5. Moderating effects of self-brand connection

Customer engagement refers to the emotional connection and interactions between customers and a brand (Sprott et al., 2009). To facilitate customer engagement, a certain level of customer involvement is needed (Moliner et al., 2018), though it does not constitute a sufficient element. Customer engagement is a proactive behavior and a psychological state towards a specific brand (Brodie et al., 2011). The self can be understood as all that individuals perceive as their own, express through possessions and communicate through posts, images and interactions; it encompasses all other outwardly expressive methods as well. A brand can influence the concept of "self", causing individuals to assume a strong connection or bond between themselves and the brand. However, the ability to influence an individual self largely depends on how the brand promotes itself. This process leads to brand associations in which consumers incorporate the brand into their self-concept, which is usually referred to as the self-brand connection (Escalas & Bettman, 2003). Self-brand connections were found to be positively related to brand attitudes and brand beliefs, which in turn further distinguish the self-brand connections and brand attitudes (Tan, Salo, Juntunen, & Kumar, 2018). For example, an individual may agree that a

brand is of a high quality, but at the same time she/he may not link it to their self-concept, reflecting a strong brand attitude, but a low self-brand connection (David & Homer, 2003).

Similarly, Harrigan et al. (2018) found that the three dimensions of consumer involvement, brand usage, and consumer brand engagement were positively associated with the self-brand connection. These studies argue that self-brand connections are largely customer-driven connections, but they are also associated with brand managers who can control brand experiences by improving the brand connections. Brand experiences can be used as a tool to improve brand loyalty and the self-brand connection (van der Westhuizen, 2018). Consumer engagement and the self-brand connection are closely associated with each other, as both have a positive association with each other (Moliner et al., 2018). Similarly, deriving value for the consumers through various business process approaches (experiential value) can thereby increase brand usage and lead to higher levels of consumer engagement. Brands can achieve greater engagement by delivering outstanding experiences, creating emotional connections with consumers, and establishing a shared identity based on a clear purpose and values. Though the self-brand connection has been studied using various constructs, its association with consumer engagement and experiential value has not been fully explored, which is addressed in this study.

H11: Self-brand connection positively moderates the relationship between experiential value and consumer engagement.

4. Methodology

4.1 Participants and data collection

We used Qualtrics to design a self-administrated survey since it allows respondents to insert a brand name as input from the social networking page, which then appears to the respondent throughout the online survey. Since our framework derives from a theoretical background, it is appropriate to use a non-probability convenience sampling method (Calder, Philips, & Tybout, 1982). Six hundred thirty-five adults from across the United States were recruited from Amazon Mechanical Turk to participate in the study in exchange for a small reward of \$0.5. After removing 150 incomplete and un-engaged responses, a total of 485 questionnaires (209 males and 276 females) were considered for further analysis. Almost 332 respondents were between 19 and 37 years of age, representing Generation Y, while the rest of the 153 respondents were above the age of 37 years.

Facebook has a tremendous number of brand pages through which brands connect with their existing and potential consumers. Kim and Park (2013) have asserted that brand pages can differ from each other on the basis of their reputation, interactional channels, privacy policy, size, informational channels, and the quantity and quality of peer-generated content. The current study only incorporates brand pages from one SNS, Facebook, because it is the most popular site, has the most dynamic functionality, and strongly supports user-generated content. The most popular brand communities identified as per our data were as follows: 1) Apple, 26%; 2) Dell, 12%; 3) Nike, 11%; 4) Samsung, 7%; 5) Walmart, 5%; 6) Amazon, 5%; 6) Starbucks, 4%; 7) Adidas, 3%; 8) and others, 27%. Moreover, time spent on Facebook by the respondents was less than 1 hour in 25% of cases, 1–2 hours in 35% of cases, 2–3 hours in 20.41% of cases, 3–4 hours in 10.72% of cases, more than 4 hours in 8.9% of cases. Also, the frequency with which

respondents reported relying on social media for shopping was as follows: daily = 16.3% , weekly = 28.9%, monthly= 23.7%, quarterly = 8.04%, once in six months = 5.4%, once a year = 4.54%, never = 13.2%. With regards to the respondents' activity on social the networking site, 6.19% reported having been active for less than 1 year, 2.47% for 1 year, 4.74% for 2 years, 3.71% for 3 years, 7.63% for 4 years, and 75.26% for more than 4 years.

4.2 Non-Response Bias and Common Method Bias

Before starting the empirical analyses, an overall examination of dataset was conducted and bias checks have been conducted - in particular tests of non-response bias, and common method bias. We have collected data through an online survey link from an online platform. The link remained active for the respondents for seven days and desired number of responses ($n=635$) were obtained within the timeframe and from one group without any reminders. Therefore, we did not face the issue of non-response bias, which refers to comparing early and late responses. Consequently, it can be ascertained that non-response bias is a non-issue in the current study.

However, validity of the study can be influenced if data is collected at the same time and from the same population — termed as common-method bias (Podsakoff et al. 2003). In order to statistically identify whether our data is free of common-method bias, we applied Harman's single factor test. An exploratory factor analysis was run by constraining the number of factors to one and using an un-rotated solution. After the analysis of current dataset, the maximum variance explained by a single factor came out to be 39.972, which is well below the threshold value of 50%. Therefore, with the current dataset, common method bias was not an issue as it does not influence the validity of the current study.

4.3 Measures

All of the items included in the current study have been adapted from the previous studies as given in Table 1. We have employed a seven-point Likert scale ranging from 1 = “strongly disagree” to 7 = “strongly agree”. The experiential value construct, consisted of cognitive value, hedonic value, social value, and ethical value, was adapted from Varshneya and Das (2017) and consisted of 16 items. Moreover, consumer engagement, comprising cognitive processing, affection, and activation, consisted of eight items and was adapted from Hollebeek et al. (2014), while the value co-creation construct was adapted from Tajvidi et al., (2020). In addition, we adapted a self-brand connection construct from Escalas and Bettman (2003), brand loyalty from Kahren (2009), and satisfaction from Barnes and Vidgen (2014).

5. Results

5.1 Measurement model, reliability, and validity

We employed Amos version 24 to analyze the data, as its one of an advantage over other analysis techniques such as liner regression is that SEM can enable to examine proposed causal paths among constructs (Gefen et al., 2003). Moreover, upon assessing the dataset, none of the parameters for skewness and kurtosis test indicated non-normal responses, with all the values being below +3 and – 3. Further, we conducted exploratory factor and confirmatory factor analysis and examined the reliability and validity of the constructs (Anderson and Gerbing, 1998; Fornell and Larcker, 1981). After such analyses, we retained the final set of items based on the criteria of eliminating all small loadings or cross loadings, since those items contributed to the poor fit of the model. In addition to that we also looked into higher values of modification indices and standardized residual co-variances in order to determine a good fit of the model. The final set of items retained are presented in Table 1:

[Table 1 about here]

Measurement scales tend to be reliable for each scale when the Cronbach alpha is above the threshold value of 0.70, as suggested by Nunnally (1978). Overall fitness of good indices for the measurement model indicated an acceptable fit for the model as presented in Table 2.

[Table 2 about here]

We tested for convergent validity and found all the loadings to be above 0.7. With respect to discriminant validity, we did not identify any strong cross loadings in the exploratory factor analysis (Hu and Bentler, 1999). In addition, the factor correlation matrix contained loadings greater than 0.7, while all the AVE values were above 0.5 indicating a satisfactory degree of internal consistency reliability of the measures as presented in Table 3.

[Table 3 about here]

5.2 Hypotheses tests and structural model results

To test our hypotheses, we evaluated the structural model. The analyses indicated that consumer engagement is a higher order construct, consisting of cognition, affection, and activation, which can be explained by the four disaggregated experiential value constructs (cognitive value, hedonic value, social value, ethical value). We controlled for the effect of self-brand connection on consumer engagement. The goodness of fit indices indicated an acceptable

fit. For instance, SRMR = 0.055; NFI = 0.918; CFI = 0.942; GFI = 0.843; AGFI = 0.809; Df = 382; and RMSEA = 0.067. The path estimates are given in Figure 2. The results provided strong support for hypotheses H1 to H9.

[Figure 2 about here]

5.3 Mediation tests

For mediation analysis (H10a to H10c), we conducted an indirect effect analysis with 10,000 bootstrapped samples and a 99% confidence level. It should be noted that our research framework emphasizes *indirect-only mediation* (Zhao et al., 2010). In other words, we formed no hypothesis based on the direct effects of the experiential value on brand relationship performance (i.e., satisfaction and brand loyalty) and value co-creation. Table 4 shows that the indirect relationships between experiential value, satisfaction, brand loyalty, and value co-creation were significantly mediated by consumer engagement. We further conducted an alternate model (see appendix) by including twelve additional direct effects of experiential value on satisfaction, brand loyalty, and value co-creation. The results revealed that only two out of twelve direct effects were statistically significant (social values on satisfaction: $b = .61, t = 7.04, p > .001$; ethical value on value co-creation: $b = .27, t = 4.60, p > .001$). Despite these statistically significant results, we must remain cautious about the potential of spurious correlation without any theoretical justification. With this comparative analysis, we further confirmed that only the significant indirect effect of experiential value was related to brand relationship performance outcomes and value co-creation via consumer engagement, thus supporting hypotheses H10a, H10b, and H10c.

[Table 4 about here]

5.4 Moderation tests

To examine H11, we conducted a series of moderation models (Hayes, 2013; model 1) with 10,000 bootstrap samples. As presented in Table 5, the self-brand connection had significant interaction effects on the relationship between consumer engagement with respect to cognitive, social, and ethical values, but did not significantly impact the relationship between consumer engagement and hedonic value. In brief, self-brand connection functions as a moderator, with high levels of self-brand connection leading to greater consumer engagement. One important point of note is that self-brand connection alone did not significantly predict consumer engagement (Figure 2: $b = .06$, $t = 1.35$, $p > .05$). To conclude, experiential value serves as an important means for explaining consumer engagement, which is further moderated by the degree of self-brand connection. Thus, hypothesis H11 was partially supported.

[Table 5 about here]

6. Discussions

Experiential value, studied in terms of cognitive value, social value, ethical value, and hedonic value, has not been explored in previous studies. Therefore, the current study provides an empirical insight into how experiential value influences consumer engagement. Previous studies by Sweeney and Soutar (2001) and Sanchez et al. (2006) examined the relationships between social value, emotional value, and functional value and how they affect other constructs, such as loyalty, satisfaction, and patronage intention. Their studies provided a good starting point for further investigating this relationship in a social commerce context. In addition, the current study differs from previous studies (Mathwick et al., 2001; Sweeney and Soutar, 2001; Sanchez

et al., 2006) because it encapsulates experiential value as a holistic concept. However, previous studies have focused more on the dimensional level of predictive validity (Varshneya et al., 2017)

The extant literature reveals that no study to date has captured experiential value's influence on consumer engagement in the social commerce domain, which is important given its significance. Therefore, such a focus constitutes a significant merit of the current study and a unique contribution to the literature. Similarly, while we identified a few studies that have captured the influence of consumer engagement on satisfaction, self-brand connection, brand loyalty, and satisfaction, our study incorporates the self-brand connection as a moderator, which can be further explained in different settings, namely the positive associations of consumer engagement with the self-brand connection (Harrigan et al., 2018), brand loyalty (Rather et al., 2018), and satisfaction (Vega-Vazquez et al., 2013; Gummerus et al., 2012). However, most of the studies have focused more on offline business situations than on online/ social marketing, except for one by Gummerus et al. (2012), which identified positive association between consumer engagement and satisfaction on Facebook. Therefore, analyzing the presence of brands on SNS (Facebook) is the main strength of this study. The premise here is that a consumer's involvement with the brand pages along the lines of deriving positive value experiences can be one strong approach to understanding consumer engagement behavior and brand relationship performance outcomes.

The expectations of consumers are increasing to a great extent because of the excellent interactions provided by companies (Mckinsey, 2018). Top executives are of the view that consumer experience needs to be redefined such that it can be further translated into consumer

engagement. Traditionally, customer call centers along with online and self-service channels played a central role in facilitating customer experiences.

Given current economic trends, the inclination of consumers to seek out experiences can be the result of busy lifestyles, increased consumer awareness, greater global orientation, the need for customized services, increased spending power with plenty of available options, and most importantly, advances in technology and communication platforms (Varshneya et al., 2017). Hence, the current study provides insights into this crucial phenomenon in social commerce settings.

6.1 Theoretical implications

This research makes a twofold theoretical contribution. First, our study contributes to the existing body of knowledge by exploring and validating the relationship of experiential value and consumer engagement in the context of a social commerce brand community by complementing and responding to the call of researchers who have urged to conduct more studies in this domain (Ashley and Tuten, 2015; Bordie et al., 2013; Dessart et al., 2015; Martinez-Lopez et al., 2017; Tafesse, 2016). More specifically, the current study advances the examination of consumer engagement beyond mere personal interest in or the relevance of a specific brand (Hollebeek et al., 2014) towards an understanding of the extent to which experiential value influences consumer engagement with respect to the moderating role of the self-brand connection. In addition, the current study set out to offer investigation of the predictive value of each experiential value dimension regarding consumer engagement as it accounts for the three factors of cognitive processing, affection, and activation. As such, we contribute to the extant consumer engagement literature (Brodie et al., 2013; Hollebeek et al.,

2014; Tafesse, 2016) by identifying another important antecedent—experiential value—which serves to explain the reason behind consumers’ repeated interactions with a brand’s Facebook page thereby contributing the experiential value literature (Mathwick et al., 2001; Varshneya et al., 2017). Remarkably, we found cognitive (social) value to be the most (least) critical facet driving consumer engagement. One possible explanation is that nowadays, consumers expect an instant response by a professional brand on social media sites (Carter, 2018). In this sense, a positive cognitive value that refers to favorable consumer evaluations of their experiences with the quality of services, time, effort, and convenience (Varshneya et al., 2017) should be more relevant in motivating them to engage with a social commerce brand community than a need for social approval. The current study also provides evidence for the effect of hedonic (i.e., enjoyment, pleasure, and escapism) and ethical (i.e., trust and privacy) values on consumer engagement. Thus, we support the notion that consumers are more likely to engage in a social commerce brand community when the degree of experiential value gained through the online brand interaction increases via the presence of a strong motivational state, such as self-brand connection, and even without consumer brand involvement. In doing so, the current study contributes to the consumer engagement, experiential value, self-brand connection literature, and in particular the social commerce field.

Second, the current study provides insights regarding the positive effect of online brand interaction on brand relationship performance outcomes by adopting a holistic view of experiential value (Mathwick et al., 2001; Varshneya & Das, 2017) and consumer engagement (Hollebeek et al., 2014) from a social commerce perspective. This is a noteworthy finding because both experiential value and consumer engagement arise during online brand interaction; however, these constructs are distinct in the psychological sense. For instance, experiential value

relates to the value derived by consumers during their interactive experience with a specific virtual brand community (Mollen & Wilson, 2010), which does not underlie a motivational state, and thus, is not explained by an emotional brand relationship (Lemke, Clark, & Wilson, 2011). In contrast, engagement requires a motivational state to trigger consumer participation in a specific social commerce brand community, and as a result of long-term interactions, an emotional connection between consumers and brands is formed (Brodie et al., 2013). In this regard, the current research emphasizes a psychological sequence (Zhao, Lynch Jr, & Chen, 2010) whereby consumer engagement reflects a motivational state and emotional relationship serves as an essential construct that explains the relationship between experiential value and brand relationship performance outcomes, including satisfaction and brand loyalty, which in turn leads to value co-creation intentions. As such, it is not theoretically justified to suggest that experiential value has a direct effect on brand relationship performance constructs, which are mostly time-dependent and relationship-oriented constructs (Pansari & Kumar, 2017; Tan et al., 2018), or a direct effect on value co-creation (Nadeem et al., 2020a), which involves a consumer's active role in creating value together with a brand (Ranjan & Read, 2016).

It should also be noted that satisfaction is examined as a consequence of consumer engagement since it refers to overall satisfaction with a social commerce brand community (Brodie et al., 2013; Bowden, 2009; Gummerus et al., 2012), rather than to the antecedent to consumer engagement, which measures the satisfaction level of a consumer's post-purchase brand experience (Pansari & Kumar, 2017; Thakur, 2018; van Doorn et al., 2010). Accordingly, our study provides a theoretically driven (rather than data-driven analysis) framework that elucidates the sequential relationship between the antecedents and consequences of consumer engagement in the domain of a social commerce.

6.2 Managerial implications

The current research presents a social commerce strategy that incorporates a virtual brand community. Apart from utilizing a virtual brand community (a brand's Facebook pages) to support the social interactions between users and a brand, brand managers could leverage this platform as an online marketplace to generate revenue directly, such as a Facebook Store application that enables e-commerce on any brand's Facebook page. Thus, it is vital for a brand manager to understand how to design a valuable interactive experience for the social commerce brand community. In particular, this study provides a guideline for concentrating on specific consumer experiences as a means of enhancing consumer engagement, and subsequently, improving brand relationship performance outcomes.

In the domain of a social commerce brand community, brand managers should prioritize the cognitive, hedonic, and ethical aspects of experiential value, which is more relevant than social value for predicting consumer engagement. First, it is necessary to form a well-trained team to handle each consumer request promptly, which is related to cognitive value and serves to enhance consumer convenience by saving them time and effort. Second, brand managers should invest in content marketing that serves to stimulate consumers' interests and motivation to engage with a company's products, services, and virtual brand community. Content marketing is related to hedonic values since it focuses on content that provides value for potential and existing customers rather than communicating the excellence of its offerings. With respect to ethical value, brand managers should always update their privacy policy and invest in secure data storage to prevent a data breach incident. Importantly, brand managers should clearly

communicate how they handle and process customer data diligently on different platforms, including any third-party platform (for example, a brand's Facebook page) that is not fully controlled by the brand. Lastly, brand managers could utilize personalized communications to increase the engagement level with their customers in a social commerce brand community. For instance, they can send a personalized in-app message as a follow-up strategy to those consumers who have mentioned the brand (for example, hashtag #Nike) or checked-in at one of the brand's locations (for example, Shangri-La Hotel, Dubai). Overall, the above-mentioned strategies will help elevate levels of engagement, brand loyalty, self-brand connection, value co-creation, and satisfaction.

6.3 Limitations and future research

This study has considered experiential value as antecedents to consumer engagement on a popular social commerce brand community site (i.e., a brand's Facebook page) together with how it affects consumer satisfaction, brand loyalty, and value co-creation. In this regard, the current research is limited to three outcomes. A future study that includes experiential value and consumer engagement could be conducted to examine the consequences of such a relationship on, for instance, brand image and reputation (Foroudi et al., 2019), celebrity endorsement (Dwivedi et al., 2019), and brand recommendation (Tan, Balaji, Oikarinen, Alatalo, & Salo, 2021). Apart from the consequences of consumer engagement, future research should focus on any factors that may moderate the relationship between the antecedent and consumer engagement, such as complexity, customer expertise, membership duration, and the valence of information (Wirtz et al., 2013). One previous study has found that when consumers "Like" a brand on Facebook, it then translates into offline brand love (Wallace, Buil, & de Chernatony,

2017). Thus, another fruitful research avenue is to investigate the online influence of experiential value and consumer engagement on offline brand constructs, such as brand attachment and brand loyalty and even ethics in online platforms (Al-Imamy and Nadeem, 2021).

References

- Aaker, D. A., (1991). *Managing Brand Equity: Capitalizing on the Value of a Brand Name*. The Free Press, New York.
- Ahn, J., & Back, K. J. (2018). Antecedents and consequences of customer brand engagement in integrated resorts. *International Journal of Hospitality Management*, 75, 144-152.
- Ahn, J., Lee, C. K., Back, K. J., & Schmitt, A. (2019). Brand experiential value for creating integrated resort customers' co-creation behavior. *International Journal of Hospitality Management*, 81, 104-112.
- Ahrholdt, D., Gudergan, S., & Ringle, C. (2019). Enhancing loyalty: When improving consumer satisfaction and delight matters. *Journal of Business Research*, 94, 18-27.
- Alimamy, S., & Nadeem, W. (2021). Is this real? Cocreation of value through authentic experiential augmented reality: the mediating effect of perceived ethics and customer engagement. *Information Technology & People*.
- Anderson, R. E., & Srinivasan, S. S. (2003). E-satisfaction and e-loyalty: A contingency framework. *Psychology & Marketing*, 20(2), 123-138
- Anderson, J. C. & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.
- Apenes Solem, B. (2016). Influences of customer participation and customer brand engagement on brand loyalty. *Journal of Consumer Marketing*, 33(5), 332-342.
- Ashley, C., & Tuten, T. (2015). Creative strategies in social media marketing: An exploratory study of branded social content and consumer engagement. *Psychology & Marketing*, 32(1), 15-27.
- Assael, H. (1994). Product classification and the theory of consumer behaviour. *Journal of the Academy of Marketing Science*, 2(4), 539-552.
- Awan, A.G. & Rehman, A. (2014). Impact of customer satisfaction on brand loyalty- an empirical analysis of home appliances in Pakistan. *British Journal of Marketing Studies*, 2(8), 18-32.
- Awuor, F. O., Hayombe, P. O., Ayieko, M. A., & Agong, S. G. (2015). Experiential value co-creation: what 's the significance of the co-created value to providers? *International Journal of Business and Social Research*, 5(10), 1-9.
- Baldus, B.J., Voorhees, C. and Calantone, R. (2015). Online brand community engagement: scale development and validation. *Journal of Business Research*, 68 (5), 978-985.

- Barger, V., Peltier, J., & Schultz, D. (2016). Social media and consumer engagement: a review and research agenda. *Journal of Research in Interactive Marketing*, 10(4), 268-287.
- Barnes, S., & Vidgen, R. (2014). Technology socialness and Web site satisfaction. *Technological Forecasting and Social Change*, 89, 12-25.
- Bennett, R., Härtel, C. E., & McColl-Kennedy, J. R. (2005). Experience as a moderator of involvement and satisfaction on brand loyalty in a business-to-business setting 02-314R. *Industrial Marketing management*, 34(1), 97-107.
- Bhalla, G. (2010). *Collaboration and Co-creation: New Platforms for Marketing and Innovation*. Springer Science & Business Media.
- Bitter, S., & Grabner-Kräuter, S. (2016). Consequences of customer engagement behavior: when negative Facebook posts have positive effects. *Electronic Markets*, 26(3), 219-231.
- Boulding, W., Kalra, A., Staelin, R., & Zeithaml, V. A. (1993). A dynamic process model of service quality: from expectations to behavioral intentions. *Journal of Marketing research*, 30(1), 7-27
- Bowden, J.L.H. (2009). The process of customer engagement: a conceptual framework. *Journal of Marketing Theory and Practice*, 17(1), 63-74.
- Bowden, J. L. H., Conduit, J., Hollebeek, L. D., Luoma-Aho, V., & Solem, B. A. (2017). Engagement valence duality and spillover effects in online brand communities. *Journal of Service Theory and Practice*, 27(4), 877-897.
- Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: what is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, 73(3), 52-68.
- Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research*, 14(3), 252-271.
- Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, 66(1), 105-114.
- Cadwalladr, C. and Graham-Harrison, E. (2018). *Revealed: 50 million Facebook profiles harvested for Cambridge Analytica in major data breach*. The Guardian, 17.
- Calder, B. J., Philips, L. W., & Tybout, A. M. (1982). The concept of external validity. *Journal of Consumer Research*, 9(3), 240-244.
- Carlson, J., Rahman, M., Voola, R., & De Vries, N. (2018). Customer engagement behaviours in social media: capturing innovation opportunities. *Journal of Services Marketing*, 32(1), 83-94.
- Carlson, J., Wyllie, J., Rahman, M. M., & Voola, R. (2018). Enhancing brand relationship performance through customer participation and value creation in social media brand communities. *Journal of Retailing and Consumer Services*, 50, 333-341.
- Carter, J. (2018, Dec 3). Customers expect brand responses on social within 30 minutes. *Smart Insights*. Retrieved from <https://www.smartinsights.com/customer-relationship-management/customer-service-and-support/customers-expect-brand-responses-social-within-30-minutes/>

- Cengiz, H., & Akdemir-Cengiz, H. (2016). Review of brand loyalty literature: 2001 – 2015. *Journal of Research in Marketing*, 6(1), 407-434.
- Chiu, W., Won, D., & Bae, J. S. (2019). Customer value co-creation behaviour in fitness centres: how does it influence customers' value, satisfaction, and repatronage intention? *Managing Sport and Leisure*, 24(1-3), 32-44.
- Cooil, B., Keiningham, T. L., Aksoy, L., & Hsu, M. (2007). A longitudinal analysis of customer satisfaction and share of wallet: investigating the moderating effect of customer characteristics. *Journal of Marketing*, 71(1), 67-83.
- Cossio-Silva, F., Revilla-Camacho, M., Vega-Vázquez, M., & Palacios-Florencio, B. (2016). Value co-creation and customer loyalty. *Journal of Business Research*, 69(5), 1621-1625.
- Cova, B., Dalli, D., & Zwick, D. (2011). Critical perspectives on consumers' role as 'producers': Broadening the debate on value co-creation in marketing processes. *Marketing Theory*, 11(3), 231-241.
- Daft, R.L. & Lengel, R.H. (1986). Organizational information requirements, media richness and structural design. *Organizational Science*, 32(5), 554-571.
- David, J.M. & Homer, P.M. (2003). Self-brand connections. An exploratory study into construct validity and gender effects. *Annual Conference of the Association for Consumer Research*, Toronto.
- De Pelsmacker, P., Driesen, L., & Rayp, G. (2005). Do consumers care about ethics? Willingness to pay for fair-trade coffee. *Journal of Consumer Affairs*, 39(2), 363-385.
- Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2015). Consumer engagement in online brand communities: a social media perspective. *Journal of Product & Brand Management*, 24(1), 28-42.
- Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2016). Capturing consumer engagement: duality, dimensionality and measurement. *Journal of Marketing Management*, 32(5-6), 399-426.
- De Vries, N. J., & Carlson, J. (2014). Examining the drivers and brand performance implications of customer engagement with brands in the social media environment. *Journal of Brand Management*, 21(6), 495-515.
- Escalas, B.G. & Bettman, J.R. (2003). You are what they eat: The influence of reference groups on consumers' connections to brands. *Journal of Consumer Psychology*, 13(3), 339-348.
- Fan, D. X., Hsu, C. H., & Lin, B. (2020). Tourists' experiential value co-creation through online social contacts: Customer-dominant logic perspective. *Journal of Business Research*, 108, 163-173
- Ferrell, O., & Hartline, M. (2008). *Marketing strategy*. Fort Worth: Harcourt College.
- Fiore, A. M., & Ogle, J. P. (2000). Facilitating students' integration of textiles and clothing subject matter part one: Dimensions of a model and a taxonomy. *Clothing and Textiles Research Journal*, 18(1), 31-45.
- Fornell, C., & Larcker, D. F. (1981). *Structural equation models with unobservable variables and measurement error*. Algebra and statistics.

- Foroudi, P., Yu, Q., Gupta, S., & Foroudi, M. (2019). Enhancing university brand image and reputation through customer value co-creation behaviour. *Technological Forecasting and Social Change*, 138, 218-227.
- Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research*, 24(4), 343-373.
- Fuentes-Blasco, M., Moliner-Velázquez, B., & Gil-Saura, I. (2017). Analyzing heterogeneity on the value, satisfaction, word-of-mouth relationship in retailing. *Management Decision*, 55(7), 1558-1577.
- Gallarza, M. G., Arteaga, F., Del Chiappa, G., & Gil-Saura, I. (2015). Value dimensions in consumers' experience: Combining the intra-and inter-variable approaches in the hospitality sector. *International Journal of Hospitality Management*, 47, 140-150.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS quarterly*, 51-90.
- Gentile, C., Spiller, N., & Noci, G. (2007). How to sustain the customer experience: An overview of experience components that co-create value with the customer. *European Management Journal*, 25(5), 395-410.
- Giovanis, A. N., Zondiros, D., & Tomaras, P. (2014). The antecedents of customer loyalty for broadband services: The role of service quality, emotional satisfaction and corporate image. *Procedia-Social and Behavioral Sciences*, 148, 236-244.
- Greve, G. (2014). The Moderating Effect of Customer Engagement on the Brand Image – Brand Loyalty Relationship. *Procedia-Social and Behavioral Sciences*, 148, 203-210.
- Grewal, D., Levy, M., & Kumar, V. (2009). Customer experience management in retailing: an organizing framework. *Journal of Retailing*, 85(1), 1-14.
- Grewal, D., Roggeveen, A., Sisodia, R., & Nordfält, J. (2017). Enhancing Customer Engagement Through Consciousness. *Journal of Retailing*, 93(1), 55-64.
- Gummerus, J., Liljander, V., Weman, E., & Pihlström, M. (2012). Customer engagement in a Facebook brand community. *Management Research Review*, 35(9), 857-877.
- Gustafsson, A., Johnson, M. D., & Roos, I. (2005). The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. *Journal of Marketing*, 69(4), 210-218.
- Hajli, N., Shanmugam, M., Papagiannidis, S., Zahay, D., & Richard, M. O. (2017a). Branding co-creation with members of online brand communities. *Journal of Business Research*, 70, 136-144.
- Hajli, N., Sims, J., Zadeh, A. H., & Richard, M. O. (2017b). A social commerce investigation of the role of trust in a social networking site on purchase intentions. *Journal of Business Research*, 71, 133-141.
- Harrigan, P., Evers, U., Miles, M., & Daly, T. (2018). Customer engagement and the relationship between involvement, engagement, self-brand connection and brand usage intent. *Journal of Business Research*, 88, 388-396.

- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-based Approach*. New York: Guilford Press.
- Hennig-Thurau, T., Malhotra, E. C., Frieger, C., Gensler, S., Lobschat, L., Rangaswamy, A., & Skiera, B. (2010). The impact of new media on customer relationships. *Journal of Service Research, 13*(3), 311-330.
- Hollebeek, L. D. (2011). Demystifying customer brand engagement: Exploring the loyalty nexus. *Journal of Marketing management, 27*(7-8), 785-807.
- Hollebeek, L.D., Glynn, M.S., Brodie, R.J., (2014). Consumer brand engagement in social media: conceptualization, scale development and validation. *Journal of Interactive Marketing, 28*(1), 149-165.
- Huang, Z., & Benyoucef, M. (2017). The effects of social commerce design on consumer purchase decision-making: An empirical study. *Electronic Commerce Research and Applications, 25*, 40-58.
- Huang, H. H. & Mitchell, V. (2013). Self-Brand Connection: The Role of Achievement and Brand Consciousness in Public versus Private Consumption Situations. *Global Brand Conference of the Academy of Marketing, Brand, Identity and Corporate Reputation Special Interest Group, Catholic University Porto, Portugal*.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1-55.
- Hyun, S. S. (2010). Predictors of relationship quality and loyalty in the chain restaurant industry. *Cornell Hospitality Quarterly, 51*(2), 251-267.
- Islam, J. U., & Rahman, Z. (2016). Linking customer engagement to trust and word-of-mouth on Facebook brand communities: An empirical study. *Journal of Internet Commerce, 15*(1), 40-58.
- Islam, J. U., Rahman, Z., & Hollebeek, L. D. (2018). Consumer engagement in online brand communities: a solicitation of congruity theory. *Internet Research, 28*(1), 23-45.
- Jaakkola, E., & Alexander, M. (2014). The role of customer engagement behavior in value co-creation. *Journal of Service Research, 17*(3), 247-261.
- Jahn, B., & Kunz, W. (2012). How to transform consumers into fans of your brand. *Journal of Service Management, 23*(3), 344-361.
- Jain, N. K., Kamboj, S., Kumar, V., & Rahman, Z. (2018). Examining consumer-brand relationships on social media platforms. *Marketing Intelligence & Planning, 36*(1), 63-78.
- Jani, D., & Han, H. (2014). Personality, satisfaction, image, ambience, and loyalty: Testing their relationships in the hotel industry. *International Journal of Hospitality Management, 37*, 11-20.
- Kabadayi, S., & Price, K. (2014). Consumer-brand engagement on Facebook: liking and commenting behaviors. *Journal of Research in Interactive Marketing, 8*(3), 203-223.
- Kahren, F. (2009). *Brand loyalty*. Florida: Whimiscal Publications.

- Kamboj, S., Sarmah, B., Gupta, S., & Dwivedi, Y. (2018). Examining branding co-creation in brand communities on social media: Applying the paradigm of Stimulus-Organism-Response. *International Journal of Information Management*, 39, 169-185.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59-68.
- Khan, I., Rahman, Z., & Fatma, M. (2016). The concept of online corporate brand experience: an empirical assessment. *Marketing Intelligence & Planning*, 34(5), 711-730.
- Kim, H. (2012). The dimensionality of fashion-brand experience: aligning consumer-based brand equity approach. *Journal of Fashion Marketing and Management: An International Journal*, 16(4), 418-441.
- Kim, S., & Park, H. (2013). Effects of various characteristics of social commerce (s-commerce) on consumers' trust and trust performance. *International Journal of Information Management*, 33(2), 318-332.
- Ladhari, R., Souiden, N., & Ladhari, I. (2011). Determinants of loyalty and recommendation: The role of perceived service quality, emotional satisfaction and image. *Journal of Financial Services Marketing*, 16(2), 111-124.
- Lang, M., & Hooker, N. H. (2013). An empirical test of experiential shopping in food retailing. *British Food Journal*, 115(5), 639-652.
- Leckie, C., Nyadzayo, M., & Johnson, L. (2016). Antecedents of consumer brand engagement and brand loyalty. *Journal of Marketing Management*, 32(5-6), 558-578.
- Lee, D. (2018). Strategies for technology-driven service encounters for patient experience satisfaction in hospitals. *Technological Forecasting and Social Change*, 137, 118-127.
- Lemke, F., Clark, M., & Wilson, H. (2011). Customer experience quality: An exploration in business and consumer contexts using repertory grid technique. *Journal of the Academy of Marketing Science*, 39(6), 846-869.
- Lengnick-Hall, C. A., Claycomb, V. C., & Inks, L. W. (2000). From recipient to contributor: examining customer roles and experienced outcomes. *European Journal of Marketing*, 34(3/4), 359-383.
- Lin, J., Lobo, A., & Leckie, C. (2017). The role of benefits and transparency in shaping consumers' green perceived value, self-brand connection and brand loyalty. *Journal of Retailing and Consumer Services*, 35, 133-141.
- Lin, X., Wang, X., & Hajli, N. (2019). Building E-commerce satisfaction and boosting sales: The role of social commerce trust and its antecedents. *International Journal of Electronic Commerce*, 23(3), 328-363.
- Lipsman, A., Mudd, G., Rich, M., & Bruich, S. (2012). The power of "like": How brands reach (and influence) fans through social-media marketing. *Journal of Advertising Research*, 52(1), 40-52.
- López, M., Sicilia, M., & Moyeda-Carabaza, A. A. (2017). Creating identification with brand communities on Twitter: the balance between need for affiliation and need for uniqueness. *Internet Research*, 27(1), 21-51.

- Madupu, V., & Cooley, D. O. (2010). Antecedents and consequences of online brand community participation: a conceptual framework. *Journal of Internet Commerce*, 9(2), 127-147.
- Marketing Science Institute (MSI) (2016), Research Priorities 2016-2018, *Marketing Science Institute*, Boston, MA.
- Martínez-López, F. J., Anaya-Sánchez, R., Molinillo, S., Aguilar-Illescas, R., & Esteban-Millat, I. (2017). Consumer engagement in an online brand community. *Electronic Commerce Research and Applications*, 23, 24-37.
- Mathwick, C., Malhotra, N., & Rigdon, E. (2001). Experiential value: conceptualization, measurement and application in the catalog and Internet shopping environment. *Journal of Retailing*, 77(1), 39-56.
- McKinsey & Company. (2017). *Mastering the digital advantage in transforming customer experience*. Retrieved from <https://www.mckinsey.com/business-functions/operations/our-insights/mastering-the-digital-advantage-in-transforming-customer-experience>
- McKinsey & Company. (2018). *The role of customer care in a customer experience transformation*. Retrieved from <https://www.mckinsey.com/business-functions/operations/our-insights/the-role-of-customer-care-in-a-customer-experience-transformation>
- Mellens, M., DeKimpe, M. G., Steenkamp, E. M. (1996), A review of brand-loyalty measures in marketing, *Journal of Economic Management*, 4(1). 507-533.
- Mikalef, P., Giannakos, M. N., & Pappas, I. O. (2017). Designing social commerce platforms based on consumers' intentions. *Behaviour & Information Technology*, 36(12), 1308-1327.
- Moliner, M., Monferrer-Tirado, D., & Estrada-Guillén, M. (2018). Consequences of customer engagement and customer self-brand connection. *Journal of Services Marketing*, 32(4), 387-399.
- Mollen, A., & Wilson, H. (2010). Engagement, telepresence and interactivity in online consumer experience: Reconciling scholastic and managerial perspectives. *Journal of Business Research*, 63(9-10), 919-925.
- Muniz, A. M., & O'guinn, T. C. (2001). Brand community. *Journal of Consumer Research*, 27(4), 412-432.
- Nadeem, W. (2016). Examining consumers' acceptance of social commerce in clothing e-retail. Doctoral dissertation, PhD thesis. Retrieved from: https://www.researchgate.net/publication/316472758_Examining_Consumers'_Acceptance_of_Social_Commerce_in_Clothing_E-Retail
- Nadeem, W., Andreini, D., Salo, J., & Laukkanen, T. (2015). Engaging consumers online through websites and social media: A gender study of Italian Generation Y clothing consumers. *International Journal of Information Management*, 35(4), 432-442.
- Nadeem, W., Juntunen, M., & Juntunen, J. (2017). Consumer segments in social commerce: A latent class approach. *Journal of Consumer Behaviour*, 16(3), 279-292.

- Nadeem, W., Juntunen, M., Hajli, N., & Tajvidi, M. (2019). The role of ethical perceptions in consumers' participation and value co-creation on sharing economy platforms. *Journal of Business Ethics*, 1-21.
- Nadeem, W., Juntunen, M., Shirazi, F., & Hajli, N. (2020a). Consumers' value co-creation in sharing economy: The role of social support, consumers' ethical perceptions and relationship quality. *Technological Forecasting and Social Change*, 151, 119786.
- Nadeem, W., Khani, A. H., Schultz, C. D., Adam, N. A., Attar, R. W., & Hajli, N. (2020b). How social presence drives commitment and loyalty with online brand communities? the role of social commerce trust. *Journal of Retailing and Consumer Services*, 55, 102136.
- Naumann, K. & Bowden, J. L. (2015). Exploring the process of customer engagement, self-brand connections and loyalty. *Problems and Perspectives in Management*, 13 (1), pp. 56-66.
- Nunnally, J. (1978). *Psychometric theory*, 2nd edition. McGraw hill.
- O'Cass, A., & Choy, E. (2008). Studying Chinese generation Y consumers' involvement in fashion clothing and perceived brand status. *Journal of Product & Brand Management*, 17(5), 341-352.
- Oh, H., Fiore, A. M., & Jeung, M. (2007). Measuring experience economy concepts: Tourism applications. *Journal of Travel Research*, 46(2), 119-132.
- Oh, H. J., Ozkaya, E., & LaRose, R. (2014). How does online social networking enhance life satisfaction? The relationships among online supportive interaction, affect, perceived social support, sense of community, and life satisfaction. *Computers in Human Behavior*, 30, 69-78
- Ong, K., Nguyen, B., & Syed Alwi, S. (2017). Consumer-based virtual brand personality (CBVBP), customer satisfaction and brand loyalty in the online banking industry. *International Journal of Bank Marketing*, 35(3), 370-390.
- Palmer, A. (2010). Customer experience management: a critical review of an emerging idea. *Journal of Services Marketing*, 24(3), 196-208.
- Pansari, A., & Kumar, V. (2017). Customer engagement: the construct, antecedents, and consequences. *Journal of the Academy of Marketing Science*, 45(3), 294-311.
- Payne, A. F., Storbacka, K., & Frow, P. (2008). Managing the co-creation of value. *Journal of the Academy of Marketing Science*, 36(1), 83-96
- Payne, A., Storbacka, K., Frow, P., & Knox, S. (2009). Co-creating brands: Diagnosing and designing the relationship experience. *Journal of Business Research*, 62(3), 379-389.
- Pham, T., & Ahammad, M. (2017). Antecedents and consequences of online customer satisfaction: A holistic process perspective. *Technological Forecasting and Social Change*, 124, 332-342.
- Pine, B.J., Gilmore, J.H., 1999. *The Experience Economy: Work is Theatre and Every Business a Stage*. Harvard Business Press, Boston.
- Pinho, N., Beirão, G., Patrício, L., & P. Fisk, R. (2014). Understanding value co-creation in complex services with many actors. *Journal of Service Management*, 25(4), 470-493.

- Ponsonby, S., & Boyle, E. (2004). The 'Value of Marketing 'and' The Marketing of Value' in Contemporary Times—A Literature Review and Research Agenda. *Journal of Marketing Management*, 20(3-4), 343-361.
- Prahalad, C. K., & Ramaswamy, V. (2000). Co-opting customer competence. *Harvard Business Review*, 78(1), 79-90.
- Ramaswamy, V., & Ozcan, K. (2014). *The co-creation paradigm*. Stanford University Press.
- Ranjan, K. R., & Read, S. (2016). Value co-creation: concept and measurement. *Journal of the Academy of Marketing Science*, 44(3), 290-315.
- Rather, R., Tehseen, S., & Parrey, S. (2018). Promoting customer brand engagement and brand loyalty through customer brand identification and value congruity. *Spanish Journal of Marketing*, 22(3), 319-337.
- Robinson, T., & Doss, F. (2011). Pre-purchase alternative evaluation: prestige and imitation fashion products. *Journal of Fashion Marketing and Management: An International Journal*, 15(3), 278-290.
- Roman, S. (2007). The ethics of online retailing: a scale development and validation from the consumers' perspective. *Journal of Business Ethics*, 72(2), 131-148.
- Rozenes, S., & Cohen, Y. (2017). *Handbook of research on strategic alliances and value co-creation in the service industry*. IGI Global.
- Sánchez, J., Callarisa, L., Rodriguez, R. M., & Moliner, M. A. (2006). Perceived value of the purchase of a tourism product. *Tourism Management*, 27(3), 394-409.
- Sashi, C. M. (2012). Customer engagement, buyer-seller relationships, and social media. *Management Decision*. 50(2), 253-272.
- Schmitt, B. (1999). Experiential marketing. *Journal of Marketing Management*, 15(1-3), 53-67.
- Schmitt, B. H. (2010). *Customer experience management: A revolutionary approach to connecting with your customers*. John Wiley & Sons.
- See-To, E., & Ho, K. (2014). Value co-creation and purchase intention in social network sites: The role of electronic Word-of-Mouth and trust – A theoretical analysis. *Computers in Human Behavior*, 31, 182-189.
- Shamim, A., & Ghazali, Z. (2014). A Conceptual Model for Developing Customer Value Co-Creation Behaviour in Retailing. *Global Business & Management Research*, 6(3), 185-196.
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22(2), 159-170.
- Simon, C., Brexendorf, T. O., & Fassnacht, M. (2013). Creating online brand experience on Facebook. *Marketing Review St. Gallen*, 30(6), 50-59.
- Smedlund, A., Lindblom, A., & Mitronen, L. (2018). *Collaborative value co-creation in the platform economy*. Springer.
- So, K., King, C., Sparks, B., & Wang, Y. (2014). The Role of Customer Engagement in Building Consumer Loyalty to Tourism Brands. *Journal of Travel Research*, 55(1), 64-78.

- Sprott, D., Czellar, S., & Spangenberg, E. (2009). The importance of a general measure of brand engagement on market behavior: Development and validation of a scale. *Journal of Marketing Research*, 46(1), 92-104.
- Storbacka, K., Brodie, R., Böhmman, T., Maglio, P., & Nenonen, S. (2016). Actor engagement as a microfoundation for value co-creation. *Journal of Business Research*, 69(8), 3008-3017.
- Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, 77(2), 203-220.
- Tafesse, W. (2016). An experiential model of consumer engagement in social media. *Journal of Product & Brand Management*, 25(5), 424-434.
- Tafesse, W., & Wien, A. (2018). Message Control: How a Social Media Messaging Strategy Can Influence Consumer Behavioral Engagement. *Journal of Consumer Marketing*, 35(3), 241-253.
- Tan, T. M., Salo, J., Juntunen, J., & Kumar, A. (2018). A comparative study of creation of self-brand connection amongst well-liked, new, and unfavorable brands. *Journal of Business Research*, 92, 71-80.
- Tan, T. M., Salo, J., Juntunen, J., & Kumar, A. (2019). The role of temporal focus and self-congruence on consumer preference and willingness to pay: A new scrutiny in branding strategy. *European Journal of Marketing*, 53 (1), 37-62.
- Tan, T. M., Balaji, M. S., Oikarinen, E. L., Alatalo, S., & Salo, J. (2021). Recover from a service failure: The differential effects of brand betrayal and brand disappointment on an exclusive brand offering. *Journal of Business Research*, 123, 126-139.
- Tajvidi, M., Wang, Y., Hajli, N., & Love, P. E. (2017). Brand value Co-creation in social commerce: The role of interactivity, social support, and relationship quality. *Computers in Human Behavior*.
- Tajvidi, M. Richard, M. O. Wang, Y. and Hajli, N. (2020). Brand co-creation through social commerce information sharing: The role of social media. *Journal of Business Research*, 121, 476-486.
- Thakur, R. (2018). Customer engagement and online reviews. *Journal of Retailing and Consumer Services*, 41, 48-59.
- van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer engagement behavior: theoretical foundations and research directions. *Journal of Service Research*, 13(3), 253-266.
- van der Westhuizen, L. (2018). Brand loyalty: exploring self-brand connection and brand experience. *Journal of Product & Brand Management*, 27(2), 172-184.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1-17.
- Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of marketing Science*, 36(1), 1-10.
- Varshneya, G., & Das, G. (2017). Experiential value: Multi-item scale development and validation. *Journal of Retailing and Consumer Services*, 34, 48-57.

- Varshneya, G., Das, G., & Khare, A. (2017). Experiential value: a review and future research directions. *Marketing Intelligence & Planning*, 35(3), 339-357.
- Vega-Vazquez, M., Ángeles Revilla-Camacho, M., & J. Cossío-Silva, F. (2013). The value co-creation process as a determinant of customer satisfaction. *Management Decision*, 51(10), 1945-1953.
- Verhoef, P.C., Lemon, K.N., Parasuraman, A., Roggeveen, A., Tsiros, M., Schlesinger, L.A. (2009). Customer experience creation: determinants, dynamics and management strategies. *Journal of Retailing*, 85(1), 31-41.
- Vivek, S. D., Beatty, S. E., & Morgan, R. M. (2012). Customer engagement: Exploring customer relationships beyond purchase. *Journal of Marketing Theory and Practice*, 20(2), 122-146.
- Wallace, E., Buil, I. & de Chernatony, L. (2017). Consumers' self-congruence with a "Liked" brand Cognitive network influence and brand outcomes. *European Journal of Marketing*, 51(2), 367-390.
- Wang, X., Tajvidi, M., Lin, X., & Hajli, N. (2020). Towards an ethical and trustworthy social commerce community for brand value co-creation: A trust-commitment perspective. *Journal of Business Ethics*, 167, 137-152.
- Wang, Y. J., Minor, M. S., & Wei, J. (2011). Aesthetics and the online shopping environment: Understanding consumer responses. *Journal of Retailing*, 87(1), 46-58.
- Williams, P., & Soutar, G. N. (2009). Value, satisfaction and behavioral intentions in an adventure tourism context. *Annals of Tourism Research*, 36(3), 413-438.
- Wirtz, J., Den Ambtman, A., Bloemer, J., Horváth, C., Ramaseshan, B., Van De Klundert, J., ... & Kandampully, J. (2013). Managing brands and customer engagement in online brand communities. *Journal of Service Management*, 24(3), 223-244.
- Woodruffe-Burton, H., & Wakenshaw, S. (2011). Revisiting experiential values of shopping: consumers' self and identity. *Marketing Intelligence & Planning*, 29(1), 69-85.
- Woisetschläger, D., Hartleb, V., & Blut, M. (2008). How to Make Brand Communities Work: Antecedents and Consequences of Consumer Participation. *Journal of Relationship Marketing*, 7(3), 237-256.
- Wu, C. H. J., & Liang, R. D. (2009). Effect of experiential value on customer satisfaction with service encounters in luxury-hotel restaurants. *International Journal of Hospitality Management*, 28(4), 586-593.
- Wu, P., & Lin, C. (2016). Learning to foresee the effects of social identity complexity and need for social approval on technology brand loyalty. *Technological Forecasting and Social Change*, 111, 188-197.
- Yadav, M. S., De Valck, K., Hennig-Thurau, T., Hoffman, D. L., & Spann, M. (2013). Social commerce: a contingency framework for assessing marketing potential. *Journal of Interactive Marketing*, 27(4), 311-323.
- Yoo, C., Goo, J., Huang, C., Nam, K., & Woo, M. (2017). Improving travel decision support satisfaction with smart tourism technologies: A framework of tourist elaboration likelihood and self-efficacy. *Technological Forecasting and Social Change*, 123, 330-341.

- Yuan, Y.H., and Wu, C.K. (2008). Relationships among experiential marketing, experiential value, and customer satisfaction. *Journal of Hospitality and Tourism Research*, 32 (3), 387-410.
- Zaglia, M. E. (2013). Brand communities embedded in social networks. *Journal of Business Research*, 66(2), 216-223.
- Zhang, K. Z., & Benyoucef, M. (2016). Consumer behavior in social commerce: A literature review. *Decision Support Systems*, 86, 95-108.
- Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197-206.
- Zheng, X., Cheung, C., Lee, M., & Liang, L. (2015). Building brand loyalty through user engagement in online brand communities in social networking sites. *Information Technology & People*, 28(1), 90-106.

Figure 1

The research model

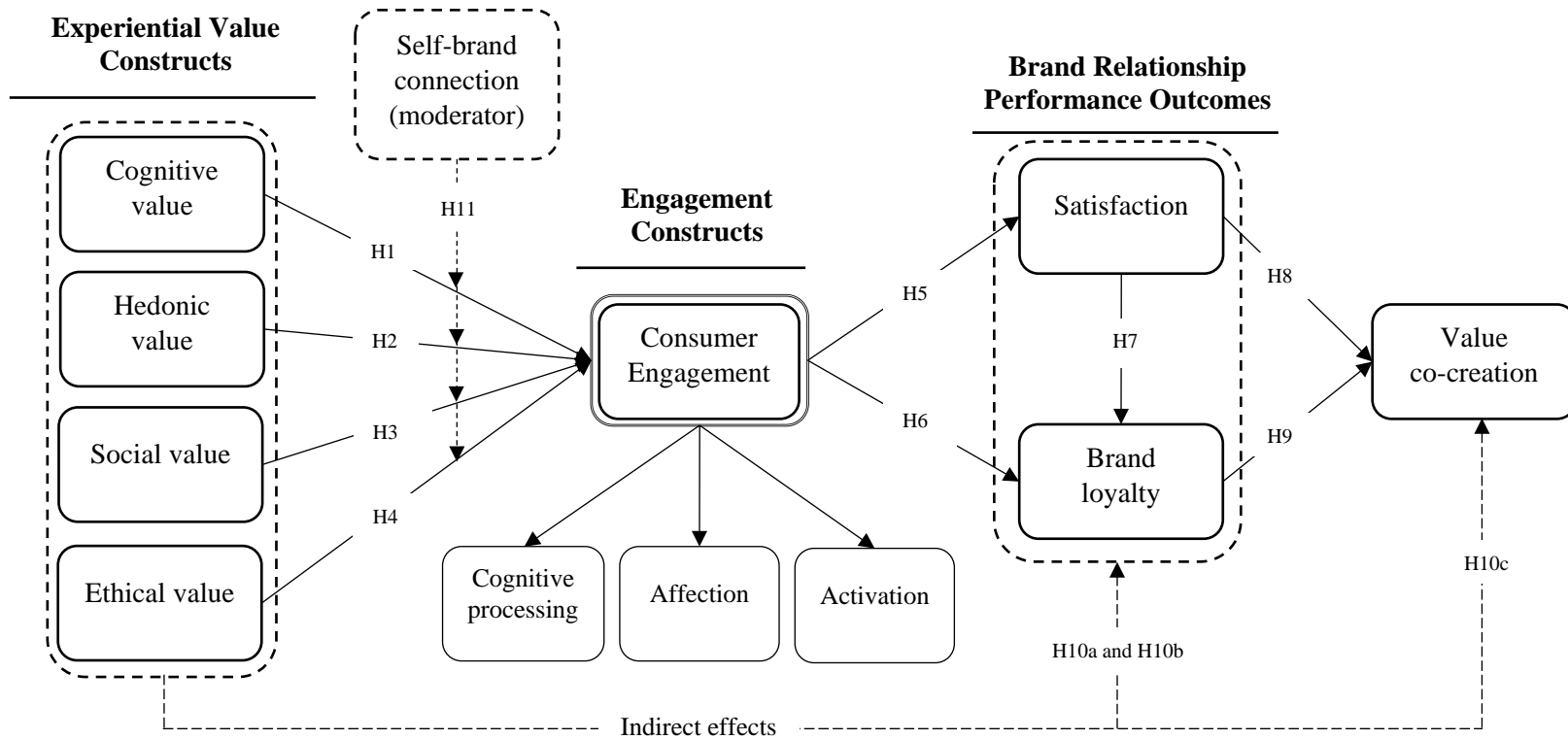


Figure 2
Structural model with results

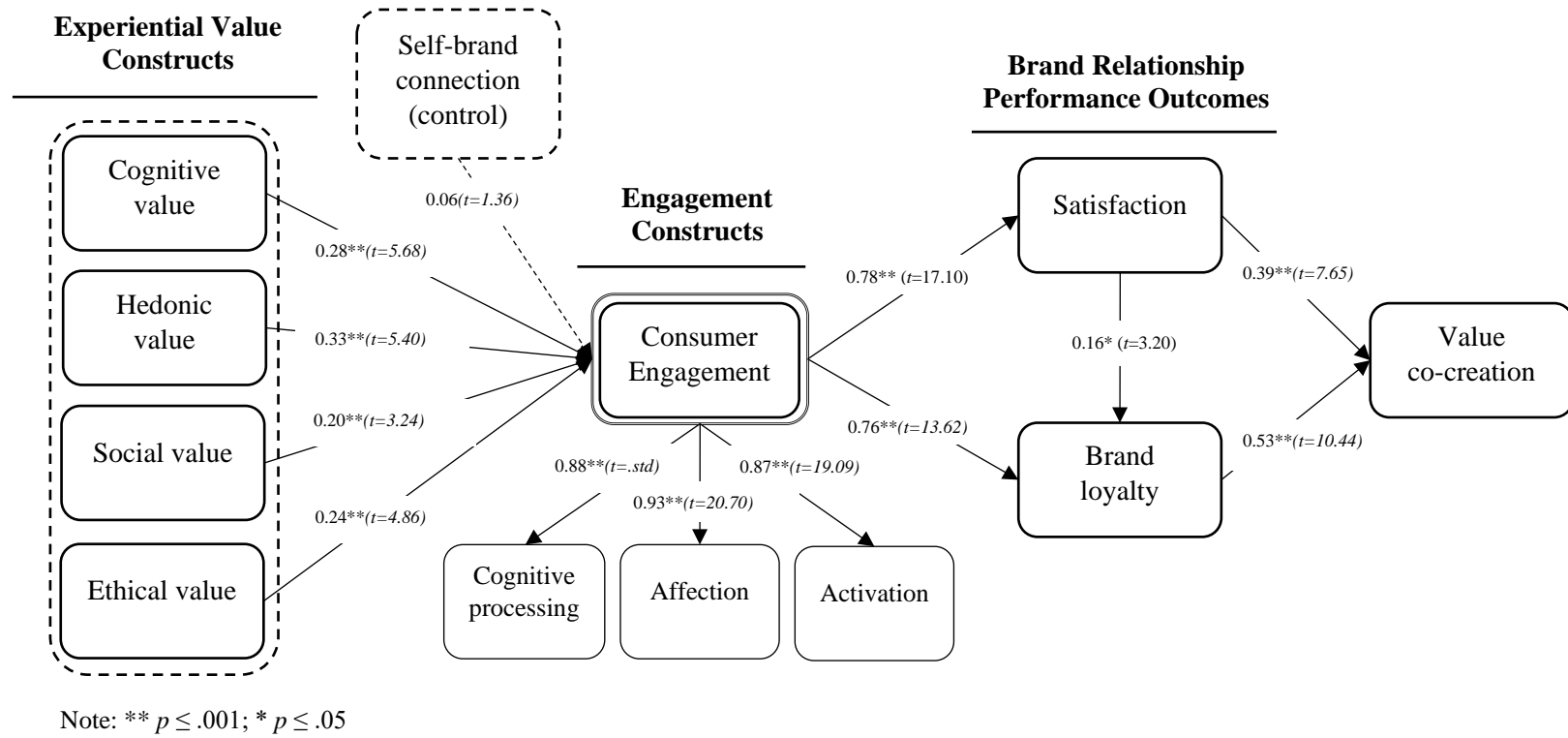


Table 1
Constructs and measurement items table

| Constructs and measurement items | Standardized loading (<i>t</i> -value) | Mean | *SD | *CA |
|---|--|------|-------|-------|
| Experiential value | | | | |
| Cognitive value | | | | |
| The services provided by this BFP are of acceptable standard | 0.805(20.79) | 5.91 | 1.114 | 0.880 |
| The staff members/administrators at this BFP are competent and accessible | 0.843(22.32) | 5.74 | 1.179 | |
| The time and effort spent at this BFP are worth the experience | 0.881(23.90) | 5.76 | 1.157 | |
| Hedonic value | | | | |
| I get so involved when I shop/explore in this BFP that I forget everything | 0.841(21.93) | 4.48 | 1.866 | 0.847 |
| Visit to this BFP serves as a way of temporary escape from daily routine | 0.874(23.17) | 4.65 | 1.806 | |
| Social value | | | | |
| Exploring/shopping at this BFP would help me in making good impression on others | 0.898(25.19) | 4.77 | 1.686 | 0.930 |
| Exploring/shopping at this BFP would provide me social approval | 0.908(25.66) | 4.69 | 1.699 | |
| My experience at this BFP is important for my esteem, status and social relationships | 0.885(24.59) | 4.38 | 1.934 | |
| The people and the environment of this BFP match with my social status | 0.832(22.27) | 4.92 | 1.591 | |
| Ethical value | | | | |
| This BFP takes care of my overall security | 0.813(21.23) | 5.35 | 1.407 | 0.893 |
| This BFP offers secure transaction methods | 0.848(22.67) | 5.40 | 1.444 | |
| This BFP takes care of my privacy | 0.920(25.83) | 5.44 | 1.399 | |
| Consumer engagement | | | | |
| Cognition | | | | |
| Using Facebook gets me to think about BFP | 0.888(.std) | 4.71 | 1.765 | 0.928 |
| I think about BFP a lot when I am using it | 0.892(28.79) | 4.71 | 1.739 | |
| Using Facebook stimulates my interest to learn more about BFP | 0.921(30.84) | 4.70 | 1.760 | |
| Affection | | | | |
| Using BFP makes me happy | 0.891(.std) | 5.38 | 1.420 | 0.909 |
| I feel good when I use BFP | 0.878(27.49) | 5.36 | 1.399 | |
| I'm proud to use BFP | 0.868(26.89) | 5.24 | 1.512 | |
| Activation | | | | |
| Whenever I'm using Facebook, I usually use BFP | 0.900(.std) | 4.57 | 1.871 | 0.890 |
| BFP is one of the brands I usually use when I use Facebook | 0.896(27.16) | 4.89 | 1.674 | |
| Brand relationship performance outcomes | | | | |

| | | | | |
|---|--------------|------|-------|-------|
| Brand loyalty | | | | 0.933 |
| I say positive things about BFP to other people | 0.877(24.22) | 5.07 | 1.635 | |
| I recommend BFP to someone who seeks my advice | 0.915(26.02) | 5.05 | 1.624 | |
| I encourage brands and others to do business with BFP | 0.931(26.82) | 5.03 | 1.648 | |
| Satisfaction | | | | 0.914 |
| My overall experience of BFP was very pleased | 0.887(24.50) | 5.66 | 1.280 | |
| My overall experience of BFP use was absolutely delighted | 0.862(23.39) | 5.44 | 1.368 | |
| My overall experience of BFP was very contented | 0.907(25.42) | 5.67 | 1.271 | |
| Value co-creation | | | | 0.894 |
| I am willing to buy the products of a brand recommended by my friends on BFP | 0.908(25.14) | 5.27 | 1.448 | |
| I will consider shopping experiences of my friends on BFP when I want to shop | 0.891(24.44) | 5.28 | 1.444 | |
| Self-brand connection (Moderator) | | | | 0.870 |
| To what extent BFP reflects a part of you and who you are? | 0.851(21.79) | 5.21 | 1.464 | |
| To what extent do you feel personally connect to BFP? | 0.907(23.82) | 5.24 | 1.543 | |
| *Note: <i>SD</i> = Standard Deviation; <i>CA</i> = Cronbach's Alpha | | | | |

Table 2
Goodness of fit indexes

| SRMR | NFI | CFI | GFI | PClose | Chi-Square | df | p-value | RMSEA |
|-------------|------------|------------|------------|---------------|-------------------|-----------|----------------|--------------|
| 0.043 | 0.931 | 0.954 | 0.869 | 0.000 | 1025.097 | 366 | 0.000 | 0.061 |

SRMR= Standardized Root Mean Square Residual; NFI= Normed Fit Index; CFI= Comparative Fit Index; GFI= Goodness of Fit Index; Df= Degrees of Freedom; RMSEA = Root Mean Square Error of Approximation

Table 3
Correlation matrix and model validity measures

| MSV | MaxR(H) | SV | CE | ICV | CV | EV | HV |
|-------|---------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0.709 | 0.936 | 0.881 | | | | | |
| 0.762 | 0.926 | 0.828 | 0.896 | | | | |
| 0.704 | 0.895 | 0.635 | 0.839 | 0.900 | | | |
| 0.638 | 0.886 | 0.516 | 0.711 | 0.703 | 0.844 | | |
| 0.605 | 0.909 | 0.627 | 0.778 | 0.761 | 0.758 | 0.861 | |
| 0.709 | 0.850 | 0.842 | 0.837 | 0.614 | 0.487 | 0.597 | 0.858 |
| 0.762 | 0.937 | 0.688 | 0.873 | 0.809 | 0.662 | 0.701 | 0.695 |
| 0.638 | 0.918 | 0.513 | 0.746 | 0.779 | 0.799 | 0.692 | 0.496 |
| 0.514 | 0.879 | 0.678 | 0.717 | 0.555 | 0.626 | 0.573 | 0.645 |

Maximum shared variance; MaxR(H) = Maximal reliability; SV= Social value; CE = Consumer engagement; ICV = Intention to co-create value; CV= Cognitive value; EV= Ethical value; HV= Hedonic

Table 4

Results of indirect effects of experiential value on satisfaction, brand loyalty, and value co-creation

| Indirect-only mediation via consumer engagement | Experiential values | | | |
|--|--------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|
| | Cognitive | Hedonic | Social | Ethical |
| H10a. Satisfaction | .216 (.050)** (CI = [.091, .347]) | .258 (.057)** (CI = [.119, .424]) | .152 (.058)* (CI = [.009, .307]) | .185 (.045)** (CI = [.067, .305]) |
| H10b. Brand loyalty | .244 (.052)** (CI = [.106, .379]) | .292 (.067)** (CI = [.130, .483]) | .171 (.066)* (CI = [.012, .348]) | .209 (.049)** (CI = [.076, .339]) |
| H10c. Value co-creation | .214 (.047)** (CI = [.091, .337]) | .256 (.058)** (CI = [.113, .419]) | .150 (.058)* (CI = [.011, .306]) | .183 (.045)** (CI = [.066, .300]) |

Notes:
** $p \leq .001$; * $p \leq .05$

Table 5
The moderating effects of self-brand connection

| Relationships | H11 Interaction β (<i>t</i> value) | Self-brand connection <i>b</i> (<i>SE</i>) | | |
|---------------------------------------|---|---|-----------------------------|----------------------------|
| | | Weak <i>M</i> = 3.813 | Average <i>M</i> = 5.228 | Strong <i>M</i> = 6.643 |
| Cognitive Value → Consumer Engagement | 0.054(2.084) ** | 0.474(0.057)*** | 0.550(0.054)*** | 0.626(0.073)*** |
| Hedonic Value → Consumer Engagement | 0.022(1.451) | | N.A. | |
| Social Value → Consumer Engagement | 0.030(1.881)* | 0.487(0.042)*** | 0.530(0.032)*** | 0.573(0.036)*** |
| Ethical Value → Consumer Engagement | 0.041(2.150)** | 0.513(0.042)*** | 0.571(0.037)*** | 0.628(0.050)*** |

Notes:
*** $p < .001$; ** $p < .05$; * $p = .061$,
N.A. = Not available due to insignificant interaction

Appendix:

Comparisons of direct effects between hypothesized model and an alternate model

| | Hypothesized model | Alternate model |
|---|-----------------------|-----------------------|
| Hypothesized direct effects | Std. estimates | Std. estimates |
| Cognitive value → Consumer engagement | 0.277**(5.682) | 0.201**(3.896) |
| Hedonic value → Consumer engagement | 0.331**(5.401) | 0.379**(5.517) |
| Social value → Consumer engagement | 0.195**(3.244) | 0.226**(3.456) |
| Ethical value → Consumer engagement | 0.237**(4.855) | 0.230**(4.392) |
| Consumer engagement → Satisfaction | 0.779**(17.098) | 0.693**(4.882) |
| Consumer engagement → Brand loyalty | 0.760**(13.622) | 0.792**(5.395) |
| Satisfaction → Brand loyalty | 0.155*(3.204) | 0.224*(3.133) |
| Satisfaction → Value co-creation | 0.389**(7.653) | 0.312**(4.675) |
| Brand loyalty → Value co-creation | 0.533**(10.441) | 0.348**(5.583) |
| <i>Twelve additional direct effects</i> | | |
| Cognitive value → Satisfaction | — ^a | 0.482**(7.039) |
| Hedonic value → Satisfaction | — ^a | -0.204 (-2.007) |
| Social value → Satisfaction | — ^a | -0.132 (-1.638) |
| Ethical value → Satisfaction | — ^a | -0.010 (-0.139) |
| Cognitive value → Brand loyalty | — ^a | -0.057 (-0.864) |
| Hedonic value → Brand loyalty | — ^a | -0.028 (-0.310) |
| Social value → Brand loyalty | — ^a | -0.038 (-0.519) |
| Ethical value → Brand loyalty | — ^a | 0.013 (0.207) |
| Cognitive value → Value co-creation | — ^a | -0.027 (-0.405) |
| Hedonic value → Value co-creation | — ^a | 0.030 (0.407) |
| Social value → Value co-creation | — ^a | 0.054 (0.782) |
| Ethical value → Value co-creation | — ^a | 0.273**(4.601) |

Notes:

Hypothesized model: SRMR= 0.055; NFI= 0.918; CFI=0.942; GFI=0.843; AGFI =0.809; Df=382; RMSEA = 0.067

Alternate model: SRMR= 0.043; NFI= 0.930; CFI=0.954; GFI=0.867; AGFI =0.833; Df=370; RMSEA = 0.061

** $p \leq .001$; * $p \leq .05$; ^a Not included

